Sigfried Giedion

The Eternal Present, Volume I

The Beginnings of Art

The A. W. Mellon Lectures in the Fine Arts

THE A. W. MELLON LECTURES IN THE FINE ARTS

delivered at the

NATIONAL GALLERY OF ART, WASHINGTON, D. C.

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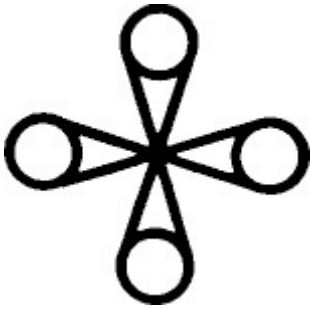


S. GIEDION

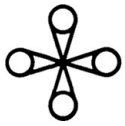
THE ETERNAL PRESENT:

A Contribution on Constancy and Change

The A. W. Mellon Lectures in the Fine Arts • 1957

The National Gallery of Art, Washington, D. C.

THE BEGINNINGS OF ART



BOLLINGEN SERIES XXXV • 6 • I
PANTHEON BOOKS

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PUBLISHED BY BOLLINGEN FOUNDATION, NEW YORK, N. Y.
DISTRIBUTED BY PANTHEON BOOKS, A DIVISION OF RANDOM HOUSE, INC., NEW YORK, N. Y.

THIS IS PART ONE OF THE SIXTH VOLUME
OF THE A. W. MELLON LECTURES IN THE FINE ARTS,
WHICH ARE DELIVERED ANNUALLY
AT THE NATIONAL GALLERY OF ART, WASHINGTON.
THE VOLUMES OF LECTURES CONSTITUTE NUMBER XXXV
IN BOLLINGEN SERIES SPONSORED BY BOLLINGEN FOUNDATION

Library of Congress Catalogue Card No. 62–7942
MAPS BY LIAM DUNNE
MONOCHROME ENGRAVINGS BY KNAPP ENGRAVING COMPANY
FOUR-COLOR ENGRAVINGS BY SCHWITTER LTD., PRINTED BY BENNO SCHWABE & CO.

New paperback printing 2023
ISBN (paper) 978-0-691-25190-5
ISBN (ebook) 978-0-691-25191-2

The A. W. Mellon Lectures in the Fine Arts have been delivered annually since 1952 at the National Gallery of Art, Washington, DC, with the goal of bringing "the people of the United States the results of the best contemporary thought and scholarship bearing upon the subject of the Fine Arts." As publication was always an essential part of the vision for the Mellon Lectures, a relationship was established between the National Gallery and the Bollingen Foundation for a series of books based on the talks. The first book in the series was published in 1953, and since 1967 all lectures have been published by Princeton University Press as part of the Bollingen Series. Now, for the first time, all the books in the series are available in one or more formats, including paperback and e-book, making many volumes that have long been out of print accessible to future generations of readers.

This edition is supported by a gift in memory of Charles Scribner, Jr., former trustee and president of Princeton University Press. The Press is grateful to the Scribner family for their formative and enduring support, and for their commitment to preserving the A. W. Mellon Lectures in the Fine Arts for posterity.

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All ages are contemporaneous.

EZRA POUND,
The Spirit of Romance (1910)

> . . . Our thoughts, wills, and actions accord with laws as definite as those which govern the motion of waves, the combination of acids and bases, and the growth of plants and animals.
>
> E. B. TYLOR,
> *Primitive Culture* (1871)

> . . . We shall start out from the one point accessible to us, the one eternal center of all things — man, suffering, striving, doing, as he is and was and ever shall be. . . . We shall study the *recurrent*, *constant*, and *typical* as echoing in us and intelligible through us.
>
> JACOB BURCKHARDT,
> Lectures on History (1868)

Zwei Dinge gibt es, auf denen es hell ist und klar, den Berg der Tiere und den Berg der Götter. Dazwischen liegt das dämmrige Tal der Menschen.

PAUL KLEE, Diary (1903)

ACKNOWLEDGMENTS

This work is the outcome of the A. W. Mellon Lectures in the Fine Arts, given at the National Gallery of Art, Washington, 1957. It is based on studies extending over more than ten years.

We cannot expect that everyone will read this book from beginning to end; I have organized the layout, therefore, as a kind of optical language to give a general idea of the line of thought followed.

Thanks to a grant from the Rockefeller Foundation I was able to make several journeys, including four visits to the caverns of southern France and northern Spain, first with the highly gifted Swiss photographer, Hugo P. Herdeg, and, after his untimely death, with his talented compatriot Achille Weider. These visits permitted me to obtain the photographs necessary to present my approach.

The photographs published in many works on prehistoric art have been retouched to make it easier for the reader to decipher the rock engravings. In this book we have strictly refrained from this practice. The most that has been done is to give an occasional photographic emphasis in the process of making the halftone plates, but nothing has been added. Our photographs show only what the camera saw and what the human eye can see under good lighting conditions; usually side lighting (*lumière frisée*) proved best. Thus these photographic records may perhaps be found useful in furthering a more intimate study of the detailed craftsmanship of primeval art.

Whenever it seems necessary, the photographs are accompanied by drawings. These do not use a continuous outline but a series of fine dots, a technique which allows for greater flexibility in tracing the intricate details of primitive art. It follows the method of Karl Schmid (Zurich School of Design), and the drawings were mostly made by one of his students, Barbara Boehrs.

Special thanks are due to the late Abbé H. Breuil, Chanoine A. Lemozi, and Professor A. Leroi-Gourhan for permission to reproduce certain important drawings.

Among the many people who gave me the benefit of their good advice and help I would especially like to thank Chanoine Lemozi, discoverer of the cavern of Pech-Merle, for much information imparted to me during long evenings at Les Cabrerets (Lot).

I owe much to the wise instruction and cordial hospitality of Count Henri Bégouën, at Château Pujol (Ariège). I also recall with gratitude three very helpful discussions: one with G. A. Luquet at Noisel-sur-Marne, at the beginning of my studies; another with D. Peyrony at Sarlat (Dordogne), shortly before his death; a third, toward the end of my

work, with Professor Leroi-Gourhan, of the Sorbonne, who is reviving research into symbols by the use of precise statistical methods.

Especial thanks are due to the first-hand knowledge of the anthropologist E. S. Carpenter (Lehigh Valley, California), who has studied Eskimo life and culture with the eyes of a man acquainted with contemporary art.

In France, Spain, and elsewhere I received very friendly assistance from a number of those directly interested in the art of the caverns: A. C. Blanc (Les Eyzies), Professor Ripoll Perelló (Barcelona), Professor P. Graziosi (Florence), Graf Vojkffy (Schloss Zeil), E. Peyrony (Museum of Les Eyzies), the Padre J. Carballo (Museum of Santander), and Dr. Pierre Charon, who permitted me to take new photographs of the Venus of Laussel and other objects in his collection at Bordeaux.

At Harvard University I am deeply grateful for the constant help given me by staff and faculty of the Peabody Museum, the Graduate School of Design, the Widener Library, and the Fogg Museum. I am indebted to Professor Gyorgy Kepes (Massachusetts Institute of Technology) for suggestions regarding the layout, and also to Achille Weider and Karl Schmid. The sculptor Mirko (Harvard) very kindly designed the dust jacket. I owe thanks to Mary Hottinger (Zurich) for translations of parts of this volume.

William McGuire, editorial manager for Bollingen Series, has gone far beyond the call of duty in his care to see that my manuscript has been cleared as far as possible from the inaccuracies which seem to afflict every author.

And, above all, I thank Professor Jaqueline Tyrwhitt (Graduate School of Design, Harvard University), who has supervised all aspects of translation and has also taken unending care and given active help in realizing this book.

At the beginning of my studies, I gave a first account of my intentions, under the title "Prehistoric and Contemporary Means of Artistic Expression," to the International Congress for Prehistoric and Protohistoric Sciences, Zurich, 1950 (pp. 81-85 in the report of the Congress). At the session of the Congress at Hamburg, 1958, I spoke on "Prehistoric Symbols and Their Meaning." Part of the second chapter of Part II was published as "Transparency: Primitive and Modern Expression," *Art News* (New York), 50th anniversary issue, summer 1952, pp. 47–50. A portion of the first chapter of Part III was published in slightly different form as "The Roots of Symbolic Expression" in *Daedalus* (Cambridge, Mass.), winter 1960. A summary of the whole two-volume work constituted the first Gropius Lecture at Harvard University, April 15, 1961, under the title "Constancy, Change and Architecture."

S. GIEDION

Doldertal, Zurich
October 1961

The "eye" in the margins of the text refers to an illustration on the page indicated. A color illustration (pp. 255 ff.) is indicated by "col." A page number alone refers to a

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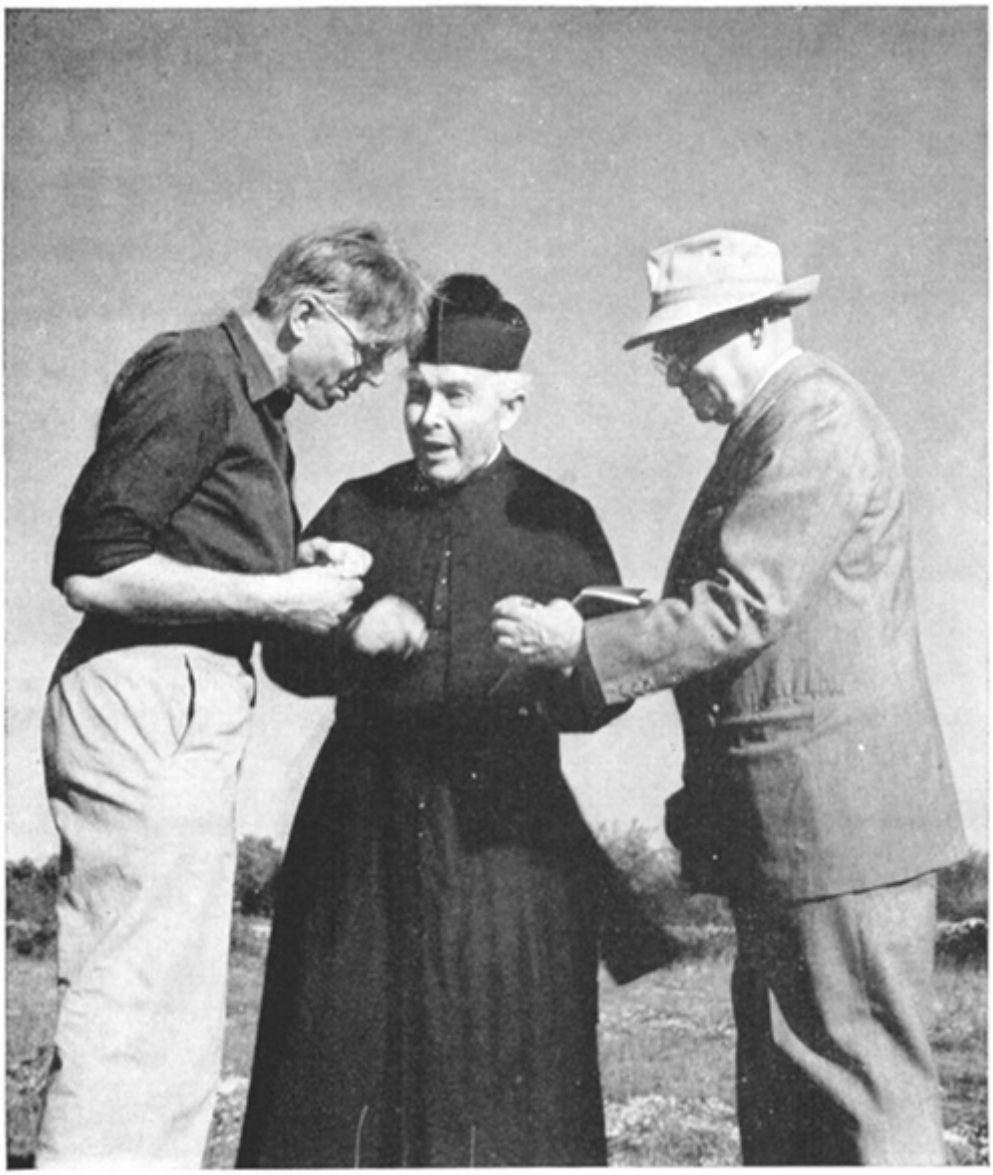

Hugo Herdeg, Chanoine Lemozi, and the author

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INTRODUCTION

One problem has always attracted me: how modern man has been formed. In *Space, Time and Architecture* I attempted to show that our period contains elements of a hidden synthesis which have not yet become a conscious pattern. Simultaneously I pointed to the gap which exists between methods of thinking and methods of feeling. This dichotomy is one of the reasons why we find it so difficult to achieve an equilibrium between inner and outer reality and to find forms which come to terms with life. Contemporary architecture, emerging in strong contrast to the ruling taste, has formed the background.

The divergence between thinking and feeling continued to broaden throughout the nineteenth century. Mechanization, the change from handicraft to industrial production, proved to be the means of showing how this break came about.

Mechanization Takes Command was not concerned with the development of machines nor machinery. I wanted to know what happened when industrial production took possession of man's intimate environment. I wanted to know what happened when industrial production came up against the organic: when it replaced the hand, when it penetrated the growing of crops, the making of bread, the slaughtering of animals, the daily round of housework, and human recreation.

The conclusions of that volume hint at the coming end of mechanistic ideas in man's apperception of the world. They are approximately as follows:

Two apparently contradictory phenomena run through human history. The human organism can be regarded as a constant. It is by nature confined within narrow limits of tolerance. It can adapt itself to a variety of conditions and is physically in a perpetual state of change; but its physical pattern has changed very little. Our organism needs contact with the earth and things that grow. Thus far man's body is subject to the laws of his animal life.

On the other hand, the relations between man and his environment are subject to continual and restless change; from generation to generation, from year to year, from instant to instant, they are in perpetual danger of losing their equilibrium. There is no static equilibrium between man and his environment, between inner and outer reality. We cannot prove in a direct way how action and reaction operate here. We can no more lay tangible hold on these processes than we can grasp the nucleus of an atom. We simply experience them by means of the several ways in which they crystallize. The differing creations of the Romans, of medieval man, and of the Baroque period reflect the relentlessly changing relation between man and the external world.

No closed circles and no repetitive patterns exist to define the adjustments of inner and outer reality.

So soon as inner and outer reality agree, a corresponding development occurs in the psyche of man. Our period demands a type of man who can restore the presently lost equilibrium between inner and outer reality. This equilibrium, never static but, like reality itself, involved in continuous change, is like that of a tightrope dancer who, by small adjustments, keeps a continuous balance between his being and empty space.

The human organism requires equipoise between its organic environment and its artificial surroundings. Separated from earth and growth, it will never attain the equilibrium necessary for life.

It is time that we become human again and let the human scale rule over all our ventures. The man in equipoise we need is new only when seen contrasted with our distorted period. He revives age-old demands which must be fulfilled in the terms of our own times if our civilization is not to collapse.

Every generation must carry both the burden of the past and the responsibility for the future. The present is coming to be seen more and more as a mere link between yesterday and tomorrow.

Every generation has to find a different solution to the same problem: to bridge the abyss between inner and outer reality by re-establishing the dynamic equilibrium that governs their relationship.

This search for the unchanging elements of human nature, elements that cannot in the long run be suppressed either by mechanization or by the nineteenth century's tragic discrepancy between thinking and feeling, led me to the third stage of my quest: the problem of—

Constancy and change

The interrelation between continuity and change cuts increasingly deeper into the very marrow of this century. It involves our attitude towards the past, that measureless container of human experience, only fragments of which come up to the surface, most of it lying dormant in unfathomable depths.

For a short period at the beginning of this century it may have seemed necessary to cut all bonds with the past, to assume a hostile attitude towards it. That the Futurists played with the idea of burning down the Louvre can be interpreted as a desire to react violently to a suffocating situation, where every vital impulse was smothered by a misuse of the past.

Since then the situation has changed. Both above and below the surface of our present age there is a new demand for continuity. It has again become apparent that human life is not limited to a single life-span but goes far beyond. It is as impossible to sever its contacts with the past as to prevent its contacts with the future. Something lives within

us which forms part of the very backbone of human dignity: I call this the demand for continuity.

We are standing today on the threshold of a new tradition. Though a painting of 1910 may have little external likeness to a painting of 1960, even if both come from the hand of the same master, they both belong to the same world. A painting of 1910 does not hurt the eye as something "out of fashion," something alien to the present day. Both are within the same development, but represent different stages of it.

This new demand for continuity is not bound within the confines of a few decades or centuries. A new attitude has become apparent in literature, painting, and music. If one opens *Finnegans Wake,* listens to a quartet by Béla Bartók, or looks at a picture by Joan Miró, each of them tells us that present, past, and future are not chopped off from one another but merge into one uninterrupted fabric.

Contemporary art was born out of the urge for elemental expression. The artist plunged into the depths of human experience. A real inner affinity suddenly appeared between the longings of the man of today and the longings of primeval man, crystallized in signs and symbols on the cavern walls.

This is the problem which concerns this volume, a problem which comes intimately close to the sphere of individual emotion.

In whatever ways the new tradition may develop, it grows out of a highly complex culture and is inevitably involved in another component of human experience: the interrelation of society and man, the state and the individual. Ever since man first became involved in this adventure, which proved to be without end and in continual flux, problems of relations between the state and the individual have remained as crucial as they were at the beginning.

Here too we have become interested in origins, asking what happened to man when he first created the state, an organization with unforeseeable consequences? And what happened to man when great masses of people, accustomed since the beginning of time to live in small, independent groups, became subordinated to the will of a single individual?

Again it is the problem of constancy and change which will attract our interest. To what extent did the experiences of prehistoric man live on in a highly stratified society? How great was their influence on rituals and religion? And what new human experiences had been acquired?

These problems, so far as they are mirrored in the architecture of the first high civilizations, Egypt and Sumer, form the subject of a second volume, *The Beginnings of Architecture.*

PART I

ART A FUNDAMENTAL EXPERIENCE

Art is a fundamental experience. It arises at the dawn of man's need for expression. It precedes architecture. The period which elapsed between man's first attempts to distill his feelings through visual forms (outline and color) and the birth of architecture, at the beginning of the Sumerian and Egyptian civilizations, was several times longer than the entire historic period. Indeed, at least ten millenniums before the first rectangular brick was molded, painting had already attained a high degree of monumentality, as we see in the vaulted caverns of Lascaux and Altamira.

Art came into being with *Homo sapiens*, when man's brain reached its full dimensions. This was in the Aurignacian-Perigordian period; but even before then man must have perceived the outlines and impressions his feet and fingers made in the soft clay which covered the ceilings, walls, and floors of the caverns, as well as the scratches upon the rock walls made by the cave bears. But it was not until after *Homo sapiens* had fully developed that man felt an urge to trace in clay lines and forms imbued with symbolic significance.

Opinions differ widely about the origin of art. G. H. Luquet, a philosophical writer and prehistorian of the 1920's, explained the origin of art as some sort of spontaneous invention that occurred when man suddenly perceived likenesses to fragments of animals or human figures in certain haphazard tracings and felt an urge to complete them. This urge, in his view, had its roots in the human desire for adornment.

Another theory of the origin of art may have been based upon the psychic insecurity felt in the late nineteenth century. It was fully developed as early as 1906 by Wilhelm Worringer in his doctoral thesis, translated (1953) as *Abstraction and Empathy*. In his view, the deepest sources of artistic creation were man's anxiety and fear, his cosmic anguish, referring to the words of Statius: "Primus in orbe Deos fecit timor" (It was fear that first put gods into the world). Herbert Read, both in his introductory notes for a London exhibition ("40,000 Years of Modern Art") and in *Icon and Idea*, his Charles Eliot Norton lectures at Harvard University, extended Worringer's view and referred to "cosmic anxiety" as the common denominator of prehistoric and contemporary art (1955, p. 42).

In the heyday of materialistic interpretation, a theory was put forward refuting the often repeated opinion that art was merely a pastime or amusement and stating that the origins of art lay in ritual and magic. The man who dared to present this theory, at the opening of the century, was Salomon Reinach, then director of the Musée des Antiquités Nationales (at St-Germain-en-Laye, near Paris), an archaeologist as well as a prehistorian. His essay *L'Art et la magie* (1903) was certainly influenced by the ideas of J. G. Frazer, and especially by the reports of ethnologists (such as B. Spencer and F. J. Gillen) on the Australian aborigines: "It would be a great exaggeration to pretend that magic is the sole source of art and to deny the part played by the instinct of imitation or

adornment, or the urge to communicate thoughts. But it seems that the main impulse of art in the *age du renne* [reindeer age] was bound up with the development of magic" (Reinach, 1903, p. 266).

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Reinach refers to certain carvings from small fragments of bone, depicting the flayed heads of horses, now called *formes découpées;* he says that these heads "acted as a charm to attract other horses close to the cavern" (p. 265). He took this surmise as the starting point for his statement that we need to look at prehistoric art from a different angle than the prevailing view of the nineteenth century: "To qualify it as a work of art, in the modern sense of the word, is necessarily an anachronism; the prehistoric sculptor was never preoccupied with an intent to *please*, but with the intent to *evoke.* It is, in fact, this mystic idea of evocation by means of a drawing or a relief, analogous to *invocation* by means of the word, which we must seek at the origin of art in the *âge du renne"* (p. 265).

In prehistory, when man's thought was centered on his relation to invisible forces, the deepest impulse for artistic creation lay in the powers of magic: here art became man's most precious aid.

Art born from ritual and magic; art born out of a cosmic anguish; art as a sudden invention, rooted in the urge for adornment; art as an outcome of man's urge to play; art for art's sake: all these theories, and maybe still others, contain some element of truth. The urge for art cannot be limited to a single impulse. The nature of the dominant impulse will change according to man's changing concepts of the world.

Art is a fundamental experience. It grows out of man's innate passion to develop a means of expression for his inner life. There is no difference whether the basic impulse for these feelings rises from a cosmic anguish, the urge to play, art for art's sake, or — as today— the desire to express in signs and symbols the realm of the unconscious.

The framework

In this book the greatest consideration is devoted to the two mainstreams of prehistoric man's approach to the world: the symbol and the animal. Often the animal is itself conceived as a symbol, or animals and symbols are interrelated in meaning, or they are interwoven so closely that they form a single inseparable whole.

The symbol

The reason symbols appeared so early, even before art, is owing to the workings of the human mind. Symbols were mankind's most effective weapons of survival when confronted by an inimical environment. In no other field was prehistoric man's imagination so abundant as in the invention of symbolic forms. Some of these will hold

their secret forever, the signification of others is manifold. For the overwhelming majority, meaning revolves around an ardent desire for fertility and procreation.

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There are the hands and there are the circular forms: cuplike hollows in the rock in isolation or in association with animals or other objects; *ponctuations* (dots), forming their own patterns or surrounding other configurations; and perforations, as in the *bâtons de commandement* (pierced staves).

It is open to question whether all, or even most, of these symbols can Be identified with the desire for fertility. But no such doubts can arise in the case of representations of the vulva, the phallus, and the female breast, which are all specifically related to the continuation of the species.

The supreme fertility idol was the representation of bisexuality: the combination of the two sexes as a symbol of perpetual generation. These symbols are often so abstractly depicted that their interpretation is in doubt.

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These symbols of fertility and procreation should not be confused with expressions of lustful desires. They are as sacred, as much bound up with solemn ritual, as the lingam in Hinduism. From the earliest protohistoric statues of the fertility-god Min to his relief in the great temple of Luxor, where he stands face to face with Alexander the Great, the god is always represented as ithyphallic. He is a symbol of potency, of disseminating fertility: first to the animals, later to the fields. Min is a direct continuation of the ithyphallic representations of prehistory.

The shadow of the nineteenth century's all too naturalistic approach lies over these fertility symbols. What belonged to the realm of rites and ritual was interpreted merely as lust.

440

The female statuettes of the Aurignacian-Perigordian age were labeled "Venus figurines," indicating their supposed significance. A French scholar saw "un penchant vers l'érotisme" : a German paleontologist saw "a sort of heightened eroticism" that he ascribed to an exclusive diet of meat. That these figurines were in no way prehistoric pin-up girls, but that these mature women, with their heavy breasts, protuberant belly, and exaggerated buttocks, were symbolic representations of fertility, was defended in 1934 by H. Bégouën.

The animal

One of the most profound revolutions in man's relation to the world began at the end of the paleolithic era: the dethronement of the animal. Up till then man had considered himself a minor creature, less powerful and less beautiful than his revered fellow creature the animal.

With the domestication of certain animals and the later institution of a rigid social hierarchy, the animal was dethroned from its position of majesty. From then on, man was to consider himself the chosen master of creation.

293 ff

Representations of the animal constitute the main subject matter of upper paleolithic art as well as its highest achievement. They present an opportunity to come closer to the essential qualities of prehistoric engraving, sculpture, and painting. Some remarks follow regarding their chronology, which in the present work sometimes differs from prevailing opinion. Analysis of primeval art is here based upon treatment of the outline. A continual seeking for mastery of the outline is, we believe, the common denominator of primeval art from its earliest beginnings to the very end of the Magdalenian era. Polychrome painting, which arose during the later part of the Magdalenian era, was used as a means of modeling the surface of the body and of giving even greater force to the outline.

The animal was first regarded as a being higher than man himself: the sacred animal, the object of greatest veneration. During the paleolithic era —which was, above all, zoomorphic —the animal was the indisputable idol. This explains the great love and intensity of feeling emanating from animal representations.

The human figure

What primeval man portrayed as his own image upon the walls of the caverns or upon carved bones appears barely human to our eyes. He is very far removed from the narcissism of a creature enamored of his own beauty, as the Greeks taught us to see ourselves. Primeval man depicts himself in no way as self-assured, self-reliant, and superior.

Throughout prehistory man stands before us as a being oppressed by an eternal inferiority complex in the presence of the animal. He seems ashamed of the form given him by nature. He hides his face, he disregards his body.

On the extremely rare occasions when the features of the face are shown, they are upon amulet-sized heads less than an inch high: never upon large-scale reliefs. This does not in any way mean that primeval man was incapable of molding the human figure when he wanted to do so.

473, 270 col, 482, 497

Due consideration will be given to such rare instances as the bold relief of the Venus of Laussel or the low reliefs of the reclining females of La Magdeleine (Tarn). But even when the human body is molded with the same strong plasticity found in animal sculptures, the head is without human features: it is indicated by a vague outline around a rough portion of the rock face. The head, always accepted as the place of command over the body, took on animal-like features. This tendency was elaborated in the hybrid

figures which, from Aurignacian times on, man never tired of inventing in endless variation. These can bring us nearer to an understanding of primeval man's constant search to give form to his religious yearnings: always in vain.

Space conception

No artistic utterance exists which does not reflect man's attitude toward space. Every artistic utterance is a direct, though unconscious, projection of the impact of the world upon man: otherwise it could not have been conceived.

Both in his actions and his art, man reveals his response to his environment. All actions —however banal or primitive— arise from a philosophic frame of reference. All works of art are a psychic record. Man's attitude toward space is the psychic reflection of his visual world.

The all-embracing quality of any art is how man experiences space: space conception. Primeval art is no exception. I am afraid that here I must take a stand against the view that prehistoric art is without composition, that it is arbitrary and chaotic, that the single form is set off against chaos.

Undoubtedly prehistoric art is without a frame. It has absolute freedom of direction: this will be stressed throughout this volume. The space conception of primeval art is perhaps the most revealing trait of the conception of the oneness of the world: a world of unbroken interrelation, where everything is in association, where the sacred is inseparable from the profane.

How this situation became changed during the first high civilizations, how the multidirectional space conception of prehistory became lost, how one —the vertical — became dominant among many equal directions: all this must be postponed to a second volume.

Constancy and change

The pattern of human life is composed of threads leading from the past, interwoven with others formed by the present. Strewn between these —still invisible to us—lie those of the future.

The character of a period depends upon the degree to which different threads come uppermost. This determines whether a period is conservative, sterile, in equipoise —or revolutionary. It is this question of comparative degrees of importance which raises the problem of constancy and change. No period escapes this problem. It is eternal. Constancy does not imply just direct continuation, but rather a quality of the human mind which leaves things slumbering for long ages, suddenly to awake to new life.

At the present time the problem of constancy is of special consequence, since the threads of the past and of tomorrow have been brought into disorder by an incessant demand for change for change's sake. We have become worshipers of the day-to-day.

Life runs along like a television program: one show following relentlessly upon another, barely glancing at problems with never a notion of taking hold of them organically. This has led to an inner uncertainty, to extreme shortcomings in all essential phases of life: to what Heidegger calls "a forgetfulness of being."

In this situation the question of what has been suppressed and driven back into the unconscious and of what must be restored if man is to regain his equipoise becomes a prime requirement for any integrated culture. It was the search for the unchanging —the constant— elements of human nature (which cannot, in the long run, be suppressed either by mechanization or by the nineteenth century's tragic conflict between thinking and feeling) which led me to primeval art.

Certainly one cannot speak of a direct constancy, whether in prehistory or today, but rather of an eternal problem of equilibrium. What happens today, what happened yesterday, what will happen tomorrow, depends upon the constantly renewed struggle of the mortal creature with eternal forces.

This volume brings us to the end of prehistoric development. Soon after that point, man becomes the self-declared master of the universe: a position he will continue to retain if, in the end, he is not defeated by the secret forces he has himself unleashed. The pattern of the present day is superimposed upon the pattern of the past. This has never been more effectively presented than in some of the pictures illustrating superimposition or transparency which accompany us throughout this volume. Man developed specific tools to counter the invisible cosmic forces. Even before art the symbol appears, and with it abstraction.

Much has changed in man's character and thinking since prehistory, but the main task he has to fulfill within his own short span of life remains unaltered: his striving to come to terms with the invisible forces, at whose mercy he is and must always be, whether he is hunting for mammoth or for the moon.

There is nothing to lament in this struggle between the ephemeral and the eternal. It creates the very essence of life: movement.

Life is never still. It is ever in movement, ever in tension between constancy and change. These are not really opposites. They complement one another. The richness of life consists in their right amalgamation. This forever recurring problem can reach a solution only in periods when the mind of man is oriented toward the courses of the stars.

PART II
THE MEANS OF EXPRESSION IN PRIMEVAL ART

ABSTRACTION

The need for abstraction is one of the constituent elements of the human spirit in every aspect of its expression.

The search for the nature of abstraction in the realm of art is more complicated and involved than in the world of science.

Abstraction is closely tied up with the creation of symbols. It is scarcely possible to separate one from the other. They condition one another.

Abstraction is the visible projection of the symbol: not always but in most cases.

In those long periods rooted in the depths of time, which can only be relatively dated, from the primeval beginnings of art in the Aurignacian age until the first high civilizations of Egypt and Sumer, abstraction meant the distillation of the essential elements from an intangible multiplicity of forms.

Such distillation can occur in many ways. Here, from a wide field of possibilities, two ways have been selected in which abstraction was used for purposes of simplification and concentration.

Abstraction in the form of signs and symbols

267 col

Abstraction can take the form of a sign replete with special symbolic meaning of a magical or sacred nature. Ever since prehistoric times, all religions have used this kind of symbol. From the primeval beginnings of art, abstraction merged with the realm of magic, or exorcism of hostile powers. Along the cavern walls of Altamira and across the ceiling —arresting every eye —are enigmatic, strangely formed red symbols. Their meaning is hidden from us. It would be exciting indeed to know what these crowding, ever-varying magic forms of primeval times expressed. Their meaning has become lost, but there they stay. They stir us, but they remain almost inexplicable.

Abstraction by the simplification and concentration of a natural form

This can be achieved, typically, by confining an animal, or part of an animal, within a taut outline. The process of abstraction occupies a long series of gradations, from an easily recognizable form to one that is, for the uninitiated, totally incomprehensible. This sequence is manifested in the cycle of late Magdalenian art and of east Spanish mesolithic and neolithic art, as well as in early Mesopotamian and Persian ceramics.

Abstraction existed throughout the long epochs of primeval art; in the last phase it became all-powerful, and prehistorians and archaeologists constantly refer to "schematism" and "conventionalization" ; and again, at the beginning of the historical era, this capacity for abstraction played an important part in the invention of pictographic script.

But an example may first be noted to show how deeply rooted is the opinion that abstraction in art first developed during the neolithic period, the extreme end of prehistory.

The dominance of abstract forms, in the opinion of a sociologist, extends over a far wider span of time than that of any other formal principle. To quote: "[Abstract form] enters on a long period of undisputed dominion with the neolithic age, such as has never been attained again in historical times" (Hauser, I, 1951, p. 35). There follows the more precise statement: "Apart from Cretan-Mycenean art, this style dominates the whole period of the bronze and iron and of the Ancient-Oriental and archaic Greek ages . . . a period of world history reaching from approximately 5000 to 500 B.C. In relation to this period of time all later styles seem short-lived."

"But what determined the age-old predominance of this conception of art which was so strictly controlled by the principles of abstract forms? How was it able to outlast so many different economic, social and political existences?" (Ibid., p. 35.) The answer which follows, though indeed simple, contradicts historical reality: "The geometrical style corresponds to an equally uniform sociological characteristic, which exerts a determining influence . . . namely the tendency towards a homogeneous organization of economy, towards an autocratic form of government and a hieratic outlook in the whole of society . . . as opposed . . . to the still unorganized, primitively individualistic nomadic existence of the hunters."

37

Unfortunately history cannot be so simplified as to equate "naturalistic" art with individualistic hunting peoples and abstract art with homogeneous organization and a religious outlook. The opinion that the hunter, as the sharpest observer, became naturalistic in his art and that the farmer, more passively occupied, tended towards abstract forms is also denied by the facts; for the hunters at the end of the ice age transformed things into abstractions just as much as the early farmers of Susa or Samarra did on their beautiful ceramic vessels.

The theory of the sociologist Hauser is based on the materialistic point of view of the nineteenth century. In his highly influential *Zur Psychologie der primitiven Kunst* (On the Psychology of Primitive Art; 1908), the famous physiologist Max Verworn developed the theory of the primacy of naturalistic (or, as he calls it, "physioplastic") art, using the arguments of experimental physiology. But Verworn himself gave only a scientific façade to the theory, which before him had been elaborated by others —for

example, H. Balfour, in *The Evolution of Decorative Art* (1893) and A. C. Haddon, in *The Evolution of Art* (1895).

Now we see the prehistorian beginning to oppose the erroneous belief in the primacy of naturalistic art, as A. Blanc, of the Paleolithic Institute in Rome, has courageously done in *Dall' astrazione a ll' organicità* (1958).

ABSTRACTION AS A CONCEPT

The two divergent concepts of abstraction

Like the symbol, abstraction came into being with the beginning of art. It existed: nameless. It was simply there. Finally, at the end of prehistory, it became all-supreme: petrified. Then, at the beginning of history, abstraction became associated with new purposes far removed from the field of magic: the pictographic representation of language.

82

As a concept, detached from particular meanings, abstraction, like the symbol, could emerge only during the analytical period of Greek thought.

One notion refrains from considering the individual features of an object and puts all emphasis on the species or category to which it belongs. Stress is laid not on specific but on general and inherent characteristics. A representation does not depict an individual animal of the buffalo or deer species but rather the universal constituent elements of the species.

Abstraction in the Greek sense of *aphairesis* means "the process as well as the result of the withdrawal [of the eye] from the particular, accidental, inessential, in order to obtain the general, inevitable, essential. By bringing together essential characteristics in one artistic concept, abstraction offers us our most important means of systematically arranging the boundless multiplicity of objects which approach us in our perception, our imagination, and even in our thoughts" (Hoffmeister, 1955). Socrates was apparently the first to speak of abstraction as a concept in the ethical sense (Plato, *Republic* VII 534 b).

The second concept of abstraction is perhaps reflected by the Latin *abstrahere*, "to drag away," also "to divert." It attempts to take something from an object — to withdraw it —in order to set this part aside for more intensive consideration. In other words, one element of a particular individual is isolated from the rest.

Abstraction involving totality

The first notion —that abstraction disregards the individual —persisted throughout late antiquity and gained further strength in the transcendental views of the Middle Ages concerning both philosophy and art. The scholastics, who from the ninth century

dominated the philosophical scene for almost five hundred years, regarded abstraction as a means of comprehending general notions —the *universalia.* "In the Middle Ages the question was: are the categories and species things or words?" (Reiners, 1910, p. 12.) Whichever way it was decided, whether the universals were only names (*nomina*) or whether the universal lived within the individual "as its name," is, however, of no essential interest here. What concerns us is the orientation toward generality.

In the Middle Ages there was endless conflict over the nature of universals, ranging from the simple statement that the individual is only casual and accidental to the theological deduction that the Idea is before the being. "Before the thing, the *universalia* existed in the *intellectus aeternus* of God." John of Salisbury, who lived in the twelfth century, during the building of Chartres, and who finally became bishop of Chartres, saw in abstraction a means to discover the *universalia* in the thing.

Abstraction involving specificity

As egocentricity came to the fore, the second notion of abstraction —the "diverting," separating a part from the whole —came slowly into focus. The Renaissance prepared the way for this rupture with the point of view of the Middle Ages. It was egocentricity that enabled Descartes and his successors to introduce the rationalistic view of the world that rapidly became dominant. This resulted in the separation of logical, scientific realms that can be granted universal validity from those spheres that can only be appraised individually. In our time, the results of Descartes' separation of the two spheres of intellect and emotion have been most clearly pointed out by Alfred North Whitehead.

As a result of analytical method, abstraction also came to be considered in an anatomical or dissecting manner. Single parts, or attributes, of a *Gestalt* were "abstracted." As early as 1813, Schopenhauer, in his doctoral thesis *On the Fourfold Root of the Principle of Sufficient Reason*, stated: "The faculty of abstraction decomposes the complete, intuitive representations into their component parts, in order to think each of these parts separately as the different qualities of, or relations between, things" (tr. 1891, p. 115).

The idea that abstraction consists essentially in the separation and isolation of a part from its totality runs parallel to the scientific approach with its concentration on the particular detail. The part is abstracted, diverted, from the totality. Reference to the standard philosophical dictionaries for their definition of abstraction reveals that they stress even more drastically this process of isolation.

Abstraction, according to the *Dictionary of Philosophy and Psychology*, means "concentration of attention on those parts or characters of an object which are treated as relevant to the special interest of the moment. . . . The interest on which abstraction depends must be of a certain kind. . . . To this end its relations within the given context must be as far as possible ignored" (Baldwin, 1928).

And, according to a German philosopher, abstraction is "a singling out and retaining of special characteristics" while "neglecting other characteristics" (R. Eisler, 1927).

These identical statements clearly betray the influence of scientific methods, even perhaps their damaging tyranny over spiritual and aesthetic conceptions.

Abstraction and Gestalt psychology

But this approach which identifies abstraction with the single detail stripped from its context may well be nearing its end.

This situation has long been recognized in art and psychology, which both deal with the visual as a spiritual process. Everything in the realm of artistic creation produced by the artists of this century approximates once more to the original conception of abstraction, as a concentration of essentials. Psychology, which also deals with sense perceptions, has investigated the relationship between the parts of a whole. The parts are derived from the whole, which alone determines their real character. The whole is more than the sum of its parts, just as the sociologists have long recognized that the city is more than the mere sum of its inhabitants.

As is well known, Gestalt psychology followed this path. The word *Gestalt* incorporates, among others, the meanings of "pattern," "configuration," "form," "structure," "form qualities." *Gestalt*, with all its overtones, has now become accepted in the English language. W. Köhler observes very well that ever since Goethe used "the noun *Gestalt"* in his paper on natural science, it has had two meanings: "besides the connotation of 'shape' or 'form' as a property of things, it has the meaning of a concrete individual and characteristic entity, existing as something detached and having a shape or form as one of its attributes" (1929, p. 192).

Gestalt psychology as a method of investigation was already in existence at the end of the nineteenth century. Between 1920 and 1930 it reached its fullest extension. All this was in strong contrast to the "detailed investigation" practiced by the "machine and mosaic theory." This is how Gestalt psychologists described the method of working which concentrated on splitting up, ignoring the experiences which exist in "extended wholes" and which cannot be found in "local isolation" (ibid., p. 127).

The theory of art also became trapped in this materialistic conception. The structure of the nineteenth century makes it understandable how the influence of the rationalistic mentality became almost omnipotent in the field of art theory. This was expressed by the use of the causality principle —by the conviction that the realm of art was also controlled by an inevitable relation of cause and effect. The origin of all created forms lay in the relation of materials and intent; or, as it was later expressed: form follows function.

The German architect Gottfried Semper stated (1860–63) the theoretical principles behind this conception. When in London, as a refugee from the 1848 Revolution, he had

acquired his practical experience (in large-scale industry) and his ideological directive (Darwinism).

Three decades after Semper, the Viennese art historian Alois Riegl put his finger on the crippling influence of the materialistic conception of the origin of all artistic creation. He attacked the transference of Darwinism to art —from natural science to (as he calls it) "the realm of spiritual life."

For Riegl, the origin of all artistic creation lay in the artistic volition. In his *Stilfragen* (Questions of Style; 1893), he recognized that the fundamental intent of a work of art is to give form to what goes on in the inner life of man. Thus he reasserted the supremacy of the spiritual over the material.

ABSTRACTION THROUGHOUT PREHISTORIC ART

The definition of abstraction which concentrated attention upon an isolated part of an object —the singling out of some specific characteristic —reveals how much the original notion of the word has become distorted and devaluated. This contrasts strongly with the view of the Greek and medieval periods, when abstraction meant the general and inherent aspects of a phenomenon and not its individual or accidental aspects.

This devaluation of the meaning of abstraction has been even more marked in art than in philosophy. Only since the turn of the century has abstraction again become recognized as an artistic means of representation. It was then that one returned to the recognition of the immense role abstraction plays in the human mind by its power of concentration upon absolute essentials.

Abstraction returned as soon as artists tried to come to closer grips with reality than naturalistic representation permitted. This concentration upon essentials was inseparably connected with a new conception of space. It was developed around 1910 by a now-famous line of painters: Picasso, Braque, Léger, and several others. All were exploring. Fernand Léger used to call this process of discerning the essentials the transformation of the subject into an object: changing a naturalistic appearance (the subject) into an artistic expression of it (an object). This continued till —as in prehistory— sometimes the results could no longer be identified with their starting point, the everyday appearance of the subject.

This process of abstraction in art is by no means new. The process which we have experienced on a small scale in our own period can be observed extending through the final millenniums of the Magdalenian era, when the recognizable forms of bison, birds, fishes, etc. became changed— abstracted— into forms whose significance is by no means certain.

232, 201

It is of course possible that, even from the beginning, these abstract forms had more than one meaning. At any rate, present-day observers often see different meanings in them. An example is the Magdalenian perforated bone staff of Raymonden (*bâton de commandement*) in the museum at Périgueux: engraved on it is the head of a cervide, licking a form which was thought at first to represent foliage and later the tail of a fish (Breuil and Saint-Périer, 1927, fig. 35, no. 9) but which would seem to us, in comparison with another bone staff from La Madeleine, to represent a vulva.

The demand for abstraction was extremely strong in the late Magdalenian period and throughout the bronze and iron ages. In the rock shelters of eastern and southern Spain, the art of these late periods becomes more and more abstract and is exceedingly difficult to interpret. But this comes at the very end of a long story.

1. LAUGERIE HAUTE (*Dordogne): Pink pebble engraved with parallel and crisscross lines; proto-Magdalenian*

424, 267 col

Abstraction runs through the whole of primeval art. In the Aurignacian and Magdalenian eras we find easily recognizable representations of animals together with enigmatic symbols which had no counterpart in the visible world: they crop up over a very wide range but perhaps most strikingly in the great oval hall of Lascaux and on the painted ceiling of Altamira, where bison are placed next to enormous red abstract symbols.

Art, indeed, began with abstraction.

94, 17

There are multifarious abstractions with no clear counterpart in the visible world: short undulating lines pressed into the soft clay, which in the section on "Hands as Magic Symbols" we call "exclamation marks" ; long sinuous meanders winding across the cavern walls and ceilings; engraved lines on bones and pebbles, parallel, crisscross, zigzag, organized in groups: e.g., a beautiful pink proto-Magdalenian pebble from Laugerie Haute.

Similar symbols —straight, deeply incised lines, crossing over one another, crossed by others —extend over the walls and ceilings of hundreds of rock shelters along the tributaries of the Seine, about thirty miles from Paris. J. L. Baudet, who has explored this region extensively, dates the earliest as "middle paleolithic" (Mousterian?), but the tradition was followed up into the neolithic (1950, p. 133).

125 ff

Further, there is the widespread galaxy of circular forms whose meaning cannot be precisely determined: stone balls, cupules, rings, perforations, dots.

257 col, 241 ff

Most exciting of all are the great abstract symbols whose significance, for the most part, still partly eludes us: tectiforms, claviforms, scaliforms, etc., which are treated under the heading "The Great Symbols."

Is primeval art naturalistic?

Supreme among subjects of primeval art is the sacred animal. Without doubt there are many clearly recognizable outlines of animals —many representations which can be identified with absolute certainty. Yet, it is very doubtful whether we can call this art naturalistic.

Even when the outlines seem clearly to depict natural features, they are elusive. They appear and disappear in the flickering torchlight. They are inseparably embedded in the grooved surfaces of the rock. Many are difficult to discern even under the best conditions. The eye catches them, then suddenly they disappear. This is why we have so often been forced to supplement photographs by careful drawings.

Primeval art is never naturalistic. There was no naturalistic art in prehistory.

Naturalistic art, as we know it, is an art which imitates the appearance of things, not as they are in reality, but as they appear at one moment from the point of view of a single spectator. This is the effect of perspective. "In linear perspective — etymologically 'clear-seeing'— objects are depicted upon a plane surface in conformity with the way they are seen, without reference to their actual shapes or relations. The whole picture or design is calculated to be valid for one station or observation point

only . . . every element in a perspective representation is related to the unique point of view of the individual spectator" (Giedion, 1954, p. 31).

Nothing of this sort existed in prehistory.

513 ff

As will be shown later, no art or method of visual representation of objects exists, or can exist, without being integrally bound up with the space conception of its period. This means that the art of each period is its most direct means of communicating its feeling about the cosmic order. In the fifteenth century the principle of linear perspective "came as an entirely new invention, but seldom has a new invention been so much in harmony with the basic feelings of an epoch" (ibid., p. 31) . Since this invention makes things look as they appear at one moment from one point of view, and not as they exist in reality, it is doubtful whether we can ever use this term in reference to primeval art.

It is well known that the phrase *perspective tordue* (twisted or warped perspective) has been introduced to describe a certain technique of depicting animals in prehistory: for instance, when the body is drawn in profile but the horns or the hooves are shown frontally. This has been considered exclusively characteristic of the earliest periods of primeval art. But it is by no means only primitive. It also occurs from time to time in the later prehistoric periods— e.g., the Magdalenian —and it is prevalent during the first high civilizations.

In our second volume, it will become apparent that the method employed in Egyptian art to depict the different parts of an object as they are, and not as they momentarily appear to an onlooker, was in no way primitive. Indeed, it can be said that it was, in principle, far more direct and immediate than perspective, since it portrayed the most essential aspects of the entire object (whether animal or human being) by depicting each, frontally or in profile, so as to display its most characteristic features. This kind of representation is not naturalistic and has nothing to do with perspective. It reveals the essential aspects of an object simultaneously from different sides.

In Magdalenian art one can often recognize exactly the species of animal represented as well as its sex and relative age, because all has been concentrated in a simple outline, very close to nature. But it is not naturalistic in the sense of making the object appear as though seen from a single vantage point.

The course of abstraction throughout the whole prehistoric and protohistoric period is illustrated in nearly all the pictures in this book. In this part, only a few examples are selected to show the degree to which abstraction was present throughout all eras. The outline is the prime constituent of primeval art.

The outline in primeval art

If there is a continuous tendency throughout prehistoric art, it is the ever-increasing mastery of the outline. Our fragmentary knowledge, as well as the enormous span of the

eras we have to deal with, do not permit us to use notions derived from the brief epoch since the Renaissance: notions such as perspective, the opposition of linear and painterly, and so on.

The vast complex of prehistoric art must, we believe, be treated according to its own nature. There is a common denominator from the earliest, the Aurignacian-Perigordian period, up to the very end of the Solutrean and Magdalenian periods and even continuing into the time of the first high civilizations. This comprehensive idea consists in the outline or the contour of an object. The determination of the outline concentrates all this striving to come to terms with the formal and psychic content of an animal or human figure.

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There are many different stages in the evolution of the outline. They cannot be clearly differentiated. They are in eternal flux. But there is a development at the beginning of the Aurignacian-Perigordian period, when the outline of the animal was caught in a most primitive way. Gradually, within the same early period, the outline of the body slowly becomes smoother and more articulated; the features are more detailed, the legs are more organically connected with the body. If, for instance, we look at the giant bulls in the Great Hall of Lascaux and compare them with the later representations in the same cavern, such as the so-called "Chinese horse" in the axial gallery (*diverticule axiale*), it is apparent that the manner in which the legs are connected to the body becomes important for a relative dating of the different paintings.

26, **27**

The manner of connecting the legs to the body is also important for the representation of movement, one of the great preoccupations of prehistoric art, even in the early period. The power of the attacking bison in the cavern of Pech-Merle (Lot), with all its mystic accompaniment of dots and of other animals, was, by means of abstraction, concentrated in a single projecting movement. And this during the Aurignacian-Perigordian age.

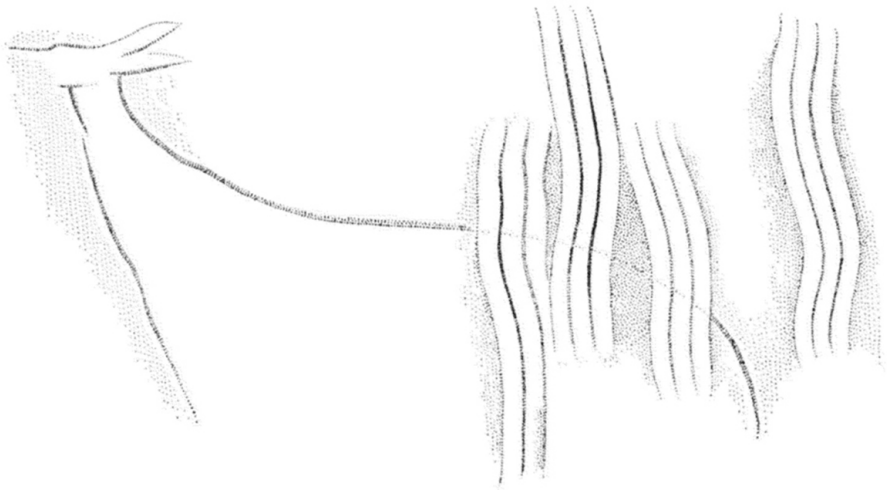
34

At the end of the Magdalenian period, when abstraction of the object became increasingly stronger, it was possible to concentrate the outline of a body in a masterly abbreviation, as in the small pebble engraving of a fleeing ibex from the Abri Murat (Lot).

The emphasis on the outline as the most telling quality of prehistoric art has still another reason. It is known that in most cases only certain places in the caverns were reserved for engravings and paintings.

Another phenomenon persists throughout all prehistoric art. When the world was regarded as an inseparable whole, rocks were looked upon with different eyes than ours. The animals that primeval man engraved or painted were, for him, already living

in the rock. They were there: he had only to complete them. It is a fact that the natural traces of forms in the rock inspired paleolithic man to create from a fragment the so-to-speak innate form of an animal or human figure.



2. ALTAMIRA (*Santander*): *Aurignacian hind. Engraving on clay, crossed by wavy lines. Right Gallery. With drawing*

318, 263 col, 266 col

One could give an almost endless list of instances showing how forms of animals, imbued with mystic significance, were born out of the rock: the bison in La Mouthe (Dordogne), where the whole outline of the back, and to a certain extent even of the head, had been formed by the natural rock; the bison of the cavern of El Castillo (Santander), where major parts of the body had been seen in a stalactite and only a few lines were necessary to bring out the image; the group of polychrome bison on the ceiling of the cavern of Altamira, whose unusual recumbent positions stem from the form of the rock protuberances. The last two examples are reproduced in color to stress the use of natural shapes as a basis for the outline of the animal. Rock, animal, and outline form an inseparable unit.

In rare cases, such as in the Salon Noir of Niaux (Ariège), not illustrated in this book, Breuil found that a natural hollow in the rock resembled for primeval man the outline of the head of an ibex, which was accentuated by painting antlers over it.

210, 481, 482

The human figure: in the cavern of Le Portel (Ariège), the outlines of an ithyphallic man were derived from a stalagmite and its irregularities. And —as a supreme example —the legs and reclining bodies of the two Venuses of La Magdeleine (Tarn) arose from the forms of the rock.

Types of abstraction in primeval art

The most usual type of abstraction is achieved by the concentration and simplification of the natural form —for example, of an animal. This is a widespread and determining feature of primeval art and includes the so-called naturalistic art of the Magdalenian period. The boundary between easily recognizable and more abstract representations of natural forms cannot be firmly drawn.

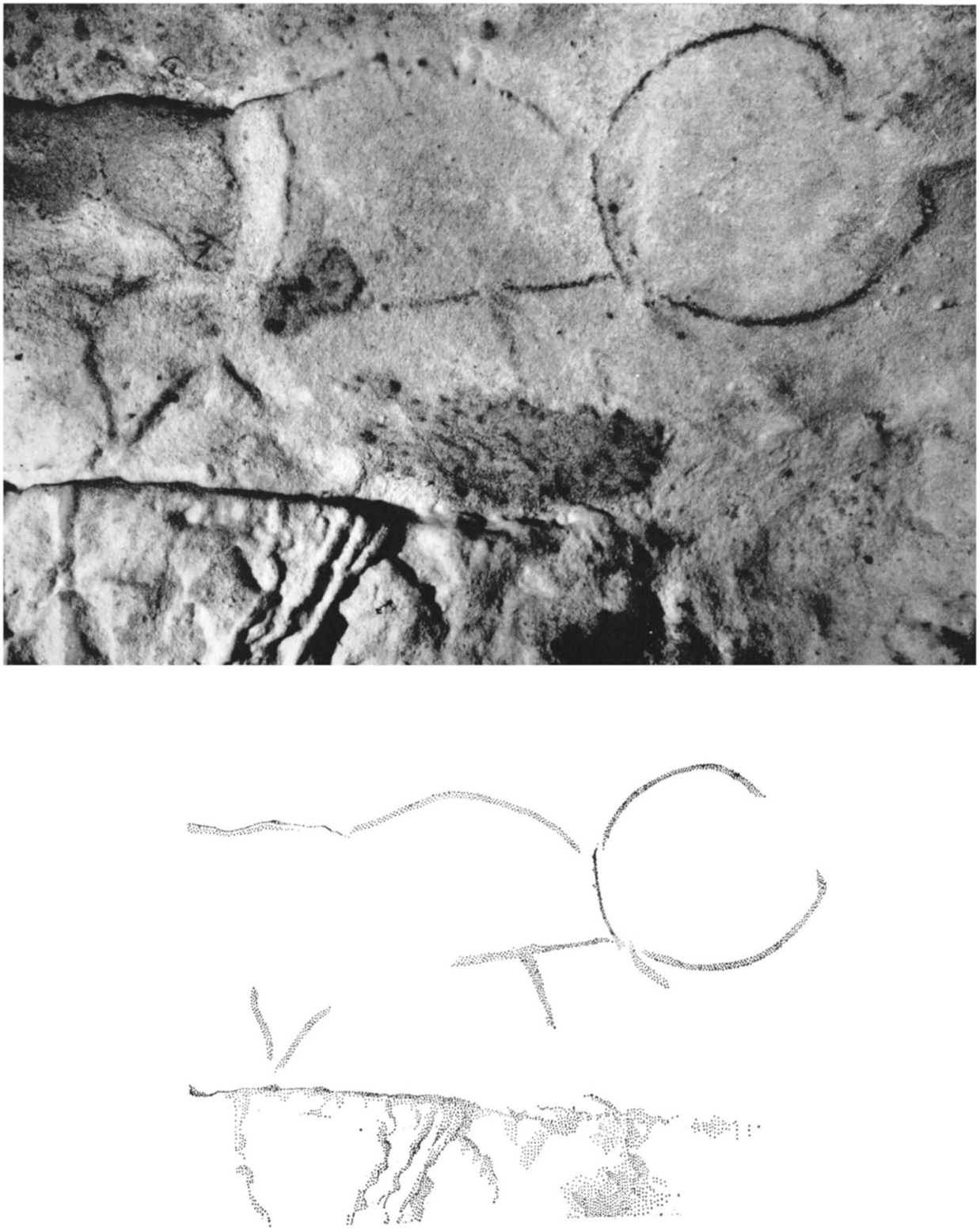
78 ff

A second type of abstraction is the use of forms and shapes which are nonexistent in nature and which become endowed with a symbolic meaning known only to the initiated. This is dealt with in Part III, “Symbolization.”

A third type consists in an intermingling of transformed natural subjects with abstract symbols.

241

In a fourth type, the urge toward concentration and simplification is driven so far that the original subject is no longer recognizable to the uninitiated eye. The form has become inexplicable, and its meaning today is often only a matter of guesswork. To the initiated, however, this extreme withdrawal from the gross and earthly natural form raised the power of the representation to a higher level of potency, transforming it into a magical symbol.



3. PECH-MERLE (*Lot*): *Aurignacian drawing of the outline of a stag, the antlers emphasized. With drawing*

Instances of this type of abstraction can already be found in the Aurignacian period, but its domination becomes absolute during the latest phases of the bronze age and the beginning of the iron age.

Aurignacian clay engraving of hind, *Altamira:* outline, abstraction, and simplification of forms were closely interrelated in the Aurignacian era: engravings in the clay surfaces of the caverns tell us this. The most monumental example is the ceiling of the Hall of the Hieroglyphs in the cavern of Pech-Merle with its numerous superimposed lines and figures.

But the method of drawing in early Aurignacian times is better seen in a simpler example. Not far from the main hall of Altamira is the so-called Right Gallery. Over the low, clay-covered ceiling of one of its recesses stretch long meanders, reaching up to six meters in length. These are sometimes interwoven with animals, of which perhaps the clearest is the head of a musk ox. At the end of this low chamber a sort of frieze depends from the ceiling. Much of this has fallen, but on a vertical surface which remains in place is the fragmentary outline of a hind. Here all attention has been devoted to the high, outstretched neck, which depicts the animal alert and scenting the breeze in a moment of tense attention. The whole situation is indicated by the two lines of the neck. The head sits horizontally on the neck, and the back is depicted by a simple curved line which, twenty-six centimeters lower down, becomes superimposed by a series of triple parallel strokes.

23

Aurignacian drawing of stag, *Pech-Merle:* The simple black outline of a stag traced in clay, in the cavern of Pech-Merle is light as a breath: it combines a primitive crudity with a fascinating expressiveness. The outline almost touches the ceiling (Lemozi, 1929, p. 78). The suppression of all detail may be partly the result of a lack of technical knowledge, but partly it must also have been intentional.

The curved line of the back is determined by a ridge on the rock face. The belly is indicated by a simple straight line. Head and forelegs are single strokes. Only a hind leg is more elaborated. All concentration is on the two large antlers which together form nearly three-quarters of a circle. Here no kind of detail has been added, such as an indication of the tines, though this would have been very easy to do. Their great curve at once arrests attention. Their significance is immediate: in them the whole strength of the animal is concentrated. This powerful effect has been created by turning the antlers on the picture plane. Already, in this early stage of Aurignacian art, we see that the *perspective tordue* was not due merely to the ineptness of the Aurignacian draftsman, but that it could also be instrumental in strengthening artistic expressiveness, just as happened later in Egyptian art.

26, 27, 258 col

Aurignacian drawing of a bison, Pech-Merle: During the Aurignacian-Perigordian period, the abstraction, abbreviation, and elimination of certain particulars or certain parts of the body were driven so far and became so sophisticated that momentary doubts

easily arise as to whether a specific example may not be a product from the other end of prehistory, when abstraction became paramount. Just such a case is the silhouette of an Aurignacian bull bison in the cavern of Pech-Merle.

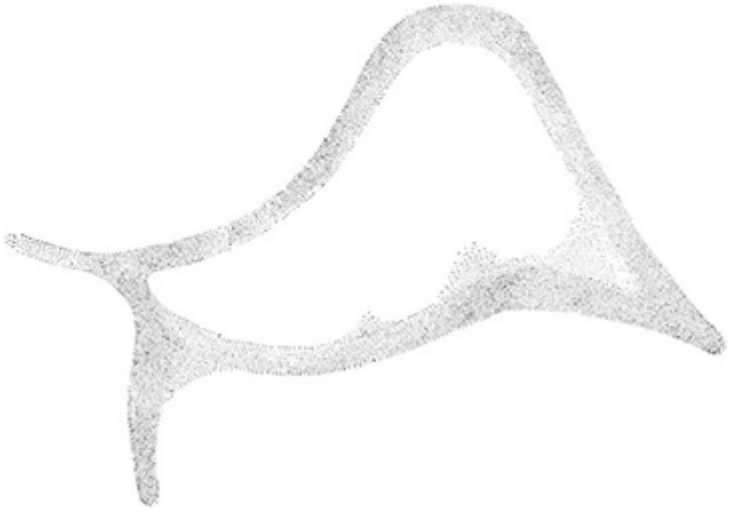
This bison immediately leaps to the eye on account of its strong black outline painted high up on a large boulder and surrounded by a natural curved ridge of the rock.

To give a vivid impression of the animal in full gallop the artist has sacrificed every particular of the body. The outline only retains those aspects which will fortify his intention. The main emphasis is deliberately laid upon the enormous humped shoulders of the bull. A steep line thrusts this heavy mass forward. No head. Head and forelegs are merged into this single line for the sake of conveying the utmost speed. A smooth concave curve forms the upstretched tail and hindlegs. A slightly curved horizontal connects the end with the forward thrust. The whole outline of this racing bison could indeed serve as the symbol of a projectile.

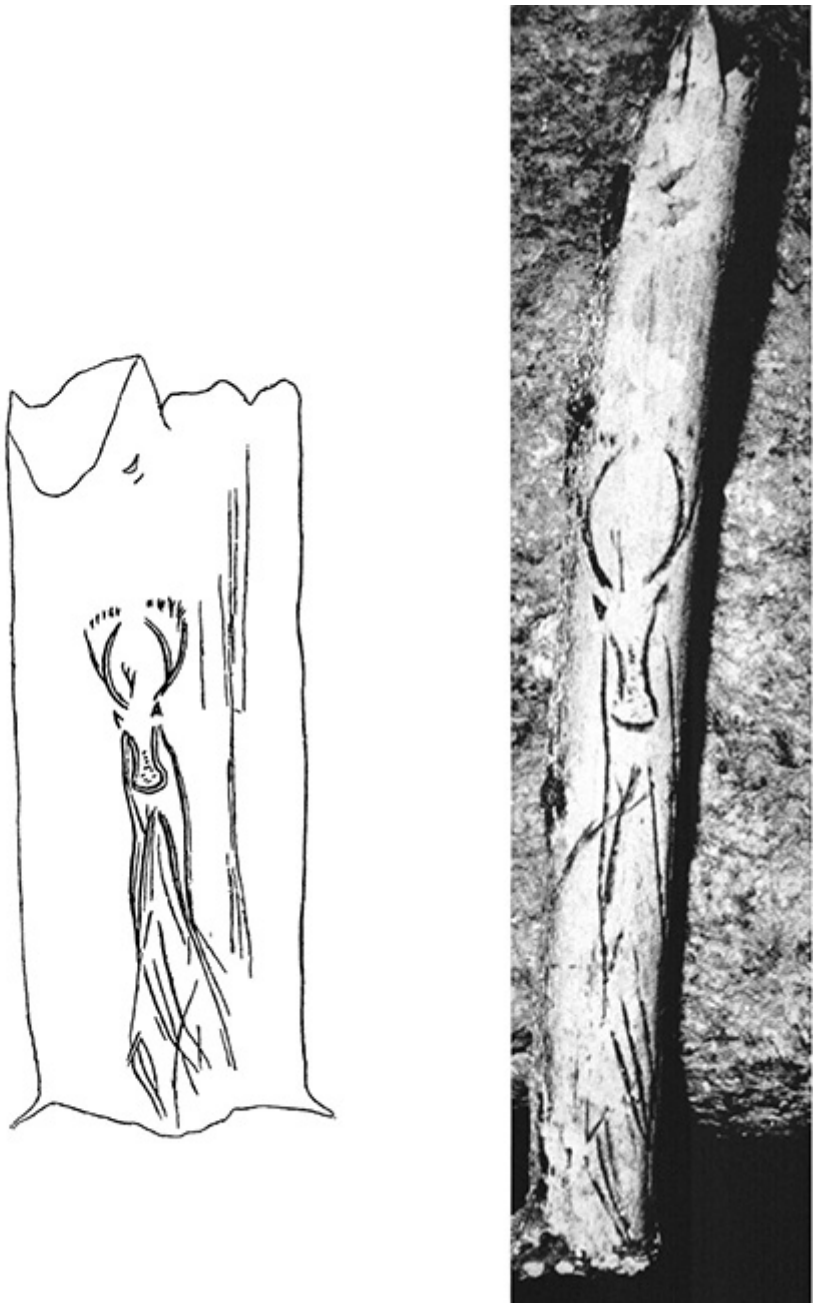
It was the Abbé Lemozi who first recognized this abstract figure as the representation of a bison in full flight, an interpretation with which Breuil concurred (Lemozi, 1929, p. 112).

This bison cannot be considered as an isolated phenomenon. It forms part of a larger scene. Below it are twenty large red disks, eight more silhouettes of bison (also deciphered as abstract female figures), and an elephant, the last being the only animal that can be clearly distinguished. As Lemozi notes (p. 114), the heads of all the bison have been completely suppressed. They are headless: as headless as the human figures with which we shall deal at some length in a later section; and A. Leroi-Gourhan wondered whether perhaps they did not represent female figures, such as those on the ceiling of the Hall of the hieroglyphs at Pech-Merle.

4. PECH-MERLE: *Aurignacian drawings on a boulder: above*, *abstract silhouette of a bison; middle*, *red disks; below*, *elephant and enigmatic figures* (*bison or human females*)



5. PECH-MERLE: *Detail of the attacking bison. Head and forelegs are merged into a single line. With drawing*



6 . GOURDAN (*Haute-Garonne*): *Frontal representation of reindeer engraved upon an antler; Magdalenian. With drawing from Piette, 1904*

Lemozi, however, did not hesitate to declare (p. 114) that this eightfold repetition of an animal in the same attitude may have been connected with "quelque rite de multiplication" : fertility symbols.

106

Even the whole scene on this boulder is not complete in itself. It is connected with another scene on a nearby boulder, where a majestic, red-encircled negative hand is again accompanied by a constellation of large red disks.

left

Magdalenian engraving of a reindeer: A rather rare frontal representation of a reindeer, in the museum at St-Germain-en-Laye, is engraved upon an antler and was found at Gourdan (Haute-Garonne) in a stratum which contained no harpoons. In other words, this would mean that the distinct trend toward abstraction also existed during the first half of the Magdalenian era. "The head is drawn as though the reindeer held it in a vertical position. The chest and front legs are suggested, but one cannot see the hind legs or the rest of the body" (Piette, 1904, p. 155).

Body, antlers, and head have been reduced to a few lines accompanied by a curve of enigmatic symbols which connects the tips of the horns. The legs are probably crossed one over the other, as is so frequent in the Aurignacian period. All is indicative of an unabated trend toward simplification.

Late Magdalenian engraving of an ibex, *El Pendo:* The cavern of El Pendo (Santander) is rich in *art mobilier* — small pieces such as figurines, engraved bone fragments or pebbles, decorated lamps, weapons, etc. These are often of fine quality. In the main, they stem from the late Magdalenian period when abstraction had gained the upper hand.

31

A horn staff, now in the archaeological museum of Santander, shows how an animal's head can be reduced to a few deeply engraved lines upon a surface as small as the tine of a stag's antler. This abstract head is identified as an ibex only by its two horns. Apart from these, just the ears are indicated. A long straight stroke evokes an idea of the head. Yet it can hardly be denied that a magical strength emanates from this small staff.

33

The exploration of El Pendo was mainly in charge of J. Carballo (Carballo and Larin, 1932). Among other objects that we shall encounter later, Carballo found another engraved stag's horn: unfinished, not yet polished. As before, only the horns enable the heads to be identified as those of ibexes. Again, the ears have been indicated. The heads are defined by two strokes. The deep lines which cut across them are sometimes found elsewhere in Magdalenian art, though, as far as we know, no clear explanation has yet been found to account for them.

Already at the beginning of this century the young Abbé Breuil recognized the importance of the processes of abstraction which he observed in Magdalenian *art mobilier.* In 1906, at the thirteenth Congress of Anthropology, in Monaco, Breuil made several important contributions. Among these, his paper on "Exemples des figures dégénérées" shows the hand of a genius. Breuil traces, step by step, the processes of abstraction in late Magdalenian bone engravings. His systematic series of drawings of the heads of ibexes, stags, oxen, bison, and horses have since been reproduced again and again in publications dealing with prehistoric art.

34, 34, 34

With the keenest observation Breuil first established the sequence of the processes of abstraction: how, in depicting the head of a horse, concentration is centered on its long head and the "trident" formed by its two upstanding ears and the crest of its mane "which takes on the appearance of a third ear" (p. 396). Breuil adds: "One can follow the disruption of the head into a few lines . . . these lines become oriented radially and follow a certain axial symmetry, suspended from the trident of ears and mane, each of which is reduced to a single line" (Lacave, Lot: coll. Viré). The process continues further: ". . . the lines become grouped into a series of chevrons fitted one into the other, always surmounted by the characteristic trident" (Laugerie Basse, Dordogne). The same abstractive process is found in a late Magdalenian ibex head from Abri Murat (Lot), in the museum of Cabrerets; it was discovered and has been published by Lemozi. All these heads are depicted frontally, in contrast to the rock drawings. The "conventionalization," as it was once called, is achieved in quite a similar way in sculptured bones. With them, however, the abstraction could not go quite so far. The main feature, the "trident" of ears and mane, had to be preserved as well as a rough outline of the head, as in a horse's head found at Brassempouy (Landes).

This early paper may have been the seed of Breuil's later extensive investigations into abstract paintings in Spain resulting in four volumes on *Les Peintures rupestres schématiques de la péninsule ibérique* (1933–35).

167, 34, 168

In the late Magdalenian period, abstract representation, fidelity to nature, and easy recognition go, so to speak, hand in hand. All can be found in a single piece, such as another bone staff from the cavern of El Pendo. Perfectly engraved, the gently curving innate form of an antler tine becomes an elongated horse head, almost identical with the small abstract engraving from Raymonden (Dordogne) drawn by Breuil. Upon the tine itself are a number of delicately engraved and easily recognizable animal heads (described later). These relate well both to the abstract embracing form of the antler itself and to the symbols which accompany them.

7. EL PENDO (*Santander*): *Late Magdalenian engraving of ibex head on stag's horn*

Late phases of abstraction

Evidences of the course of abstraction between the final stages of the Magdalenian period and the fourth-millennium ceramic art of Persia and Mesopotamia are lacking. Suddenly at that stage of protohistory, works which can stand comparison with the refinement of Magdalenian art appear without apparent antecedents; they leave us wondering from what tradition they stem.

37

These bowls and vases from Susa in Persia and Samarra in Mesopotamia, among other places, are perfect both in their form and in their artistic treatment. The

significance of the highly refined abstraction of their design usually evades us. Human figures appear rarely.

Observed from a broader perspective, these vases and bowls, which have been found mostly in tombs, belong to an immensely long age during which the visual aspect of things became transmuted into abstract form. In these offerings to the dead, geometrical patterns and animal forms are not mere decoration. Abstraction and symbol are inseparable here. They are interwoven into a single unit.

Through the bronze age and the beginning of the iron age, through the second and first millenniums up to about 600 B.C., the final stage of abstraction spread throughout Europe. This was the fourth type of abstraction: the transformation of natural forms into signs intelligible only to the initiated.

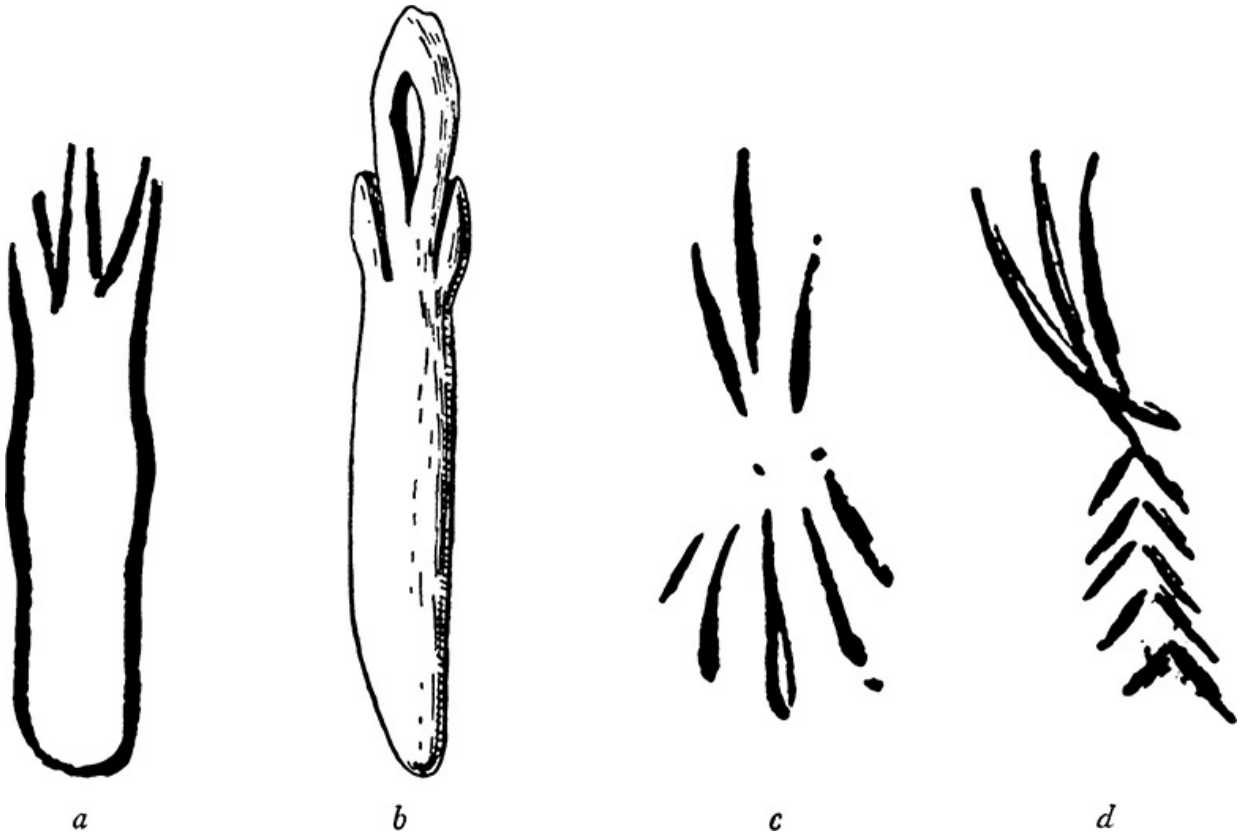
No other part of Europe is richer in works of this kind than the east and south of the Iberian peninsula, where many rock shelters have been found.

116, 145

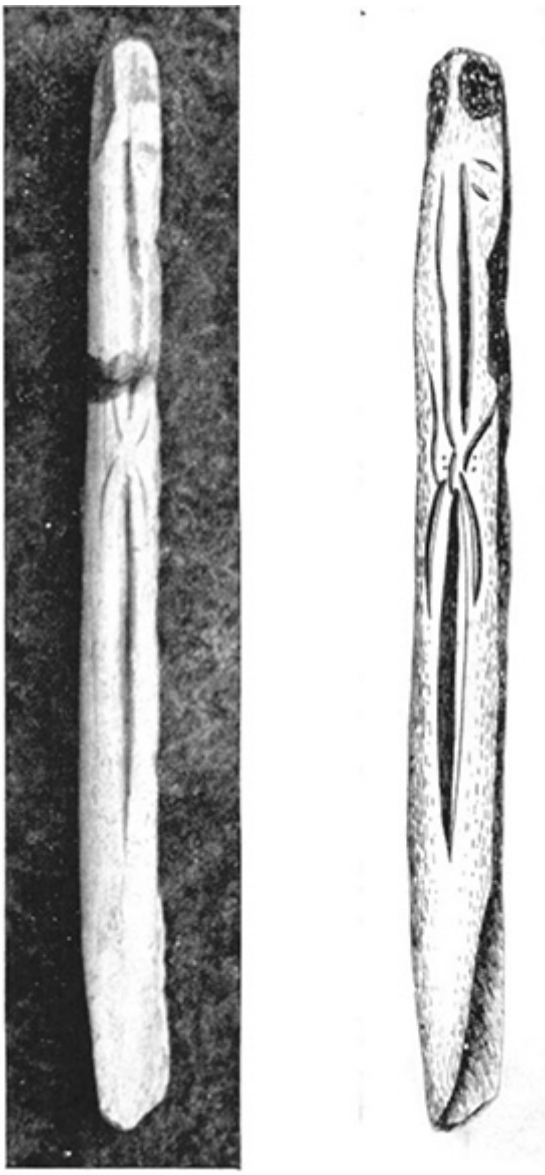
The scene has changed greatly since Magdalenian times. Art has now come out into the open: from the depths of the caverns it has climbed to the mountain heights. And not only in Spain. The process is even more evident in the Maritime Alps, on the rock walls around Monte Bego, at the border between Italy and France; in the northern Italian Alps, on great boulders in the Val Camonica; in the Swiss Alps, on altarlike stones not far from the Matterhorn.

Often it cannot be said with certainty whether the abstract configurations represent animals or human beings. The imagination of this period seems to have been obsessed by an urge to express its emotional and spiritual life through abstract figures and symbols. It must have been a tormented period, filled with demons: demons causing evil and demons warding it off.

8. EL PENDO: *Late Magdalenian engraving of ibex head* (*unfinished) on stag's horn*



9. Abstractions of horse heads: a, c, d) Engravings on bone from Raymonden (Dordogne), Lacave (Lot), and Laugerie Basse (Dordogne), as drawn by Breuil; b) sculptured bone from Brassempouy (Landes), drawn after Piette, 1904



10. ABRI MURAT (*Lot*): *Late Magdalenian head of ibex, engraved on antler. With drawing by Lemozi*

These figures and symbols are extremely small in size compared with the great compositions of the Magdalenian era. In the Spanish rock shelters the outlines are solidly filled in with color, usually red: that is, silhouettes. Though known since Aurignacian times, the silhouette now comes into almost exclusive use. It is another means of expressing the age-old principle of the outline.

114

Male and female representations are reduced to triangles, to undulating lines, to fantastic combinations of forms: “What strikes the casual observer most when studying this art group in Spain is the large number of conventionalized human beings depicted. . . . The simplest form is a vertical line showing a slight thickening at the top end and two oblique lines running downward representing the arms and legs. . . . Other human forms are built up on a basis of two triangles placed apex to apex, on these the head, arms, and

legs are sometimes placed or sometimes omitted altogether. . . . Sometimes the human figure seems to have degenerated into a circle with a vertical line through it. Sitting figures are probably represented by a pair of zigzags parallel to one another cut by a vertical line representing the body which sometimes has a knob at the top for the head" (Burkitt, 1925, p. 292).

There is an overwhelming richness in the invention of symbols and in the translation of reality into abstract forms, especially in the final phase. Ever since 1912, Breuil and his colleagues have been exploring the rock shelters of Spain and publishing their findings, first in one volume (Breuil and Burkitt, 1929), later in four volumes (Breuil, 1933–35).

177

That this art bears some relation to the painted pebbles found in Mas d'Azil (Ariège) has been pointed out by Hugo Obermaier (1916). It was early recognized that the sources of this art came from the eastern Mediterranean —from the sea-going Phoenicians, from the Greek Cycladic isles and the Minoan art of Crete (Siret, 1913). On several sides, the ancestral chain has been traced from Mesopotamian idols to the Cyclades and on to the Iberian peninsula (Kühn, tr. 1956, pp. 110–11).

There must have been links between the latest phase of painting in the Spanish rock shelters and the fourth-millennium ceramics of Persia and Mesopotamia. It can be no accident that both make such frequent use of a comblike representation of living creatures. But no evidences exist as to whether both stem from a single unknown source or whether the likeness is due to nomadism. The connecting link between late Magdalenian abstractions and the first phases of the painted pottery of Iran and Mesopotamia is the astonishing likeness of their means of expression in the use of highly abstract representations of animals.

The painted pottery of style I of Susa (Iran), which is separated only by a few ranges of hills from Mesopotamia, expresses the symbolic significance by a most concise artistic language. From the early Susa I style (beginning approximately in the early fourth millennium) to its late phase (middle of the fourth millennium) there is an increasing finesse in the design of animal abstractions, with small heads and many parallel, pectiform (comblike) lines.

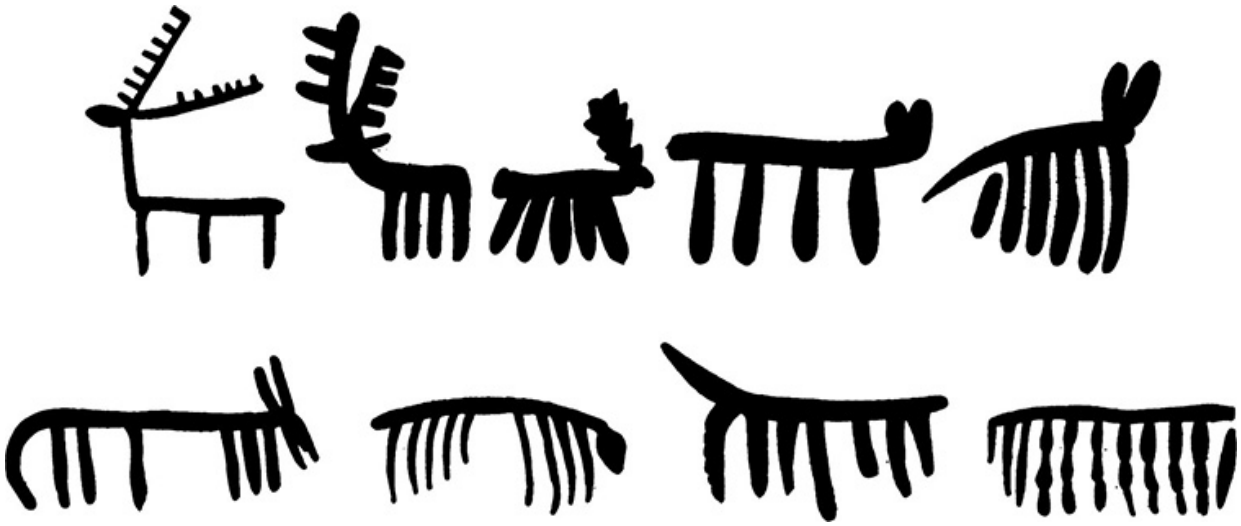
right

On a vase from a tomb, early phase Susa I style (Louvre), appears a row of abstract birds with outspread wings. The pectiform features consist of rough strokes and can be interpreted as simplified feathers. In a bowl of the late phase Susa I style (Louvre), there are abstract animals with extremely tiny heads and very thin pectiform lines between fore and hind legs. Neither the identity of the animals nor the significance of the pectiform lines can be precisely ascertained.

right

The same method of representing animals— using vertical strokes and reducing the form of the animal up to a point where it is no longer recognizable —appears later in rock shelters of southern Andalusia (Spain). Here it is much more primitive, yet the method of representation is the same. Burkitt, who studied this material together with Breuil, believes that the many comblike strokes signify legs. "The number of legs seems to be a matter of complete indifference, and the figures degenerate into comblike, or 'pectiform,' symbols, with teeth varying in number from two to twelve, or even more" (Breuil and Burkitt, 1929, p. 9). The significance of these pectiforms, used in a highly refined manner on Susa pottery of the fourth millennium and in Spanish rock shelters in the second millennium B.C., is not known, but it cannot be identified as merely a multiplication of legs.

The latest phase of abstraction ends on the mainland of Greece. The geometric or dipylon style of the eighth and seventh centuries B.C. runs parallel with the end of abstract representation both in eastern and central Europe, without there being any direct links. Their large amphoras, which often reach great size, as storage jars for oil, have a broad band around the neck on which is usually depicted a funeral procession. Here again we find human figures dominating the scene. Their triangular forms, with the thorax ending practically in a point, display a kind of abstraction similar to that of the Spanish rock shelters and reach back to the representations on Near Eastern pottery of the fourth millennium (Tell Halaf, Tepe Musyan, Samarra, etc.).



11. SOUTHERN ANDALUSIA: *Animal abstractions from rock shelters, second to first millennium. Comblike or pectiform symbols of animals. From Breuil and Burkitt, 1929*

12. SUSA, *early phase*, *style I* (*fourth millennium*): *Vase with abstract birds*

13. SUSA, *late phase*, *style I : Bowl with abstract animals having tiny heads and pectiform lines*

Nobody would suggest that these early manifestations of a young and virile people are directly connected with this Iberian art, which will soon, for long ages, fall into oblivion. The Greek abstraction of the dipylon style has nothing to do with primitive art.

Quite the contrary. The geometric style represents the close of a long tradition reaching back to the very beginnings of art. Never again will a method of representation be able to boast such a long line of descent.

ABSTRACTION TODAY

In philosophy, from Schopenhauer's time until the present day, as stated earlier, the concept of abstraction was shunted to one side. In fact, it can almost be said that a certain degeneration of the concept took place, or at least a damaging limitation: abstraction became simply the isolation of a detail from the whole.

In addition, the logical analytical methods of the neopositivists (Bertrand Russell, the Vienna School, Rudolf Carnap) conceived the problem of abstraction as lying outside serious philosophical consideration.

In art, which has the keenest ear for imminent inner changes, the situation was different. After centuries of dormancy, the concept of abstraction again came to life around 1910.

Suddenly it upreared itself, standing like a rampart against all generally accepted and seemingly indestructible public opinion.

For at that time it was known beyond doubt what reality was and how it could be represented by perspective reproduction. The work of previous centuries had proved this in many ways, despite the restrictions of a single point of view. The overthrow of this conviction, which was held by the world of letters and the public at large, would appear impossible. And yet the development took another direction, growing out of the inner life of the period. Through the misuse of trompe l'oeil during the nineteenth century, perspective had been drained of its 19 life's blood. At the same time it had been menaced and harassed by photographic precision. The wonderful discovery of the Renaissance had become a formula, bled white, run to death.

Annunciation of a poet

Presaging minds which, like clairvoyants, are not guided exclusively by logical knowledge, but rather by contact with the unknown, recognized around 1910 the meaning of this optical revolution.

Thus a poet and critic, Guillaume Apollinaire, in the midst of the art life of Paris, took his companions, Braque, Picasso, and Léger, each barely thirty years old, and gave them a place in the history of art (1913). He drew the profile of their future from their artistic beginnings. As an artistic forecast, his little book is perhaps equaled only by the slim volume *Le Salon de 1846,* written at the age of twenty-five by the poet Charles Baudelaire (1846). Now, almost half a century since the beginning of the movement, it has become clear to most people why in 1910 the few were right and the majority wrong: the world stood at a turning point.

Annunciation of an art historian

In 1906, at the time when Matisse, Picasso, and Braque were on the point of developing a new conception of space, which stemmed from our era, Wilhelm Worringer was writing his thesis *Abstraction and Empathy* (pub. 1908; tr. 1953). In it, the opposing pair abstraction and naturalism are confronted. The notion of abstraction is again recognized as an essential formulative principle of art and raised to a dominating position.

Worringer was of the same generation as Picasso and Braque. At that time a member of the faculty of Bern University, he was virtually groping in the dark; for though pictures and sculpture based on the formative principle of abstraction had existed in the past, nothing had as yet appeared in his own time. The historian who —in his own field —is nourished and tormented by the same forces as the artist fulfills a special function: he can give many searching minds direction and confidence.

Abstraction and Empathy aroused immediate attention. Worringer remarks in a later edition, of 1910 —a decisive year, marking the break-through of the movement—that the success of his publication chimed in with the unexpressed feelings of the many who "have seen through the one-sidedness and European-Classical prejudice of our customary historical conception and valuation of art. . . . To this is added the fact that the most recent movement in art has shown my problem to have gained an immediate topicality, not only for art historians, whose concern is with the evaluation of the past, but also for practising artists striving after new goals of expression. Those misconstrued and ridiculed values of the abstract artistic volition, which I sought to rehabilitate through scientific analysis, were simultaneously . . . re-established in artistic practice as well" (tr. 1953, pp. xiv-xv).

In Bergson's sense of the phrase — Bergson, for whom past, present, and future are an inseparable whole — Worringer felt that he belonged to his own time and that he was throwing a bridge between the past and future development, between yesterday and tomorrow. Since the days of Luca Pacioli and Leonardo da Vinci, this emotional connection between a scholar and the point of view of contemporary artists has become rare.

Almost like a clairvoyant, Worringer discerned the artistic stirrings of his time before they existed as artistic realities.

Building on the foundations that had been laid by Alois Riegl, Worringer drew attention to the gap between the nineteenth and twentieth centuries in artistic points of view. In *Abstraction and Empathy* he records, like Riegl, his opposition to the materialistic approach of Gottfried Semper and his followers. And Worringer could draw support from an even wider basis than Riegl. In its rapid development, psychological research had almost completely absorbed aesthetics as a part of psychology. At the turn of the century the most brilliant representative of this psychological approach was the Munich psychologist Theodor Lipps (1851–1914),

whose lectures Worringer attended. In the two volumes of his *Ästhetik* (1903–6), Lipps, in a style as penetrating as it is difficult to read, takes his point of departure not from the absolute form of an aesthetic object, but from the psychological reaction of the observing individual. Thus for Lipps the concept of empathy becomes the central starting point "for a primary psychological phenomenon." All emotional experience is based on empathy, which is not confined solely to what is going on in one's fellow beings. It can encompass the wide realm of the animate and inanimate, the organic and the inorganic. Before he published his chief work, Lipps briefly defined in an essay the essence of aesthetic empathy: "It consists in my immediate experience of, and corresponding feeling for, the aesthetic object" (1902, p. 368).

The naturalistic principle lived on in the theory of empathy in a more defined and psychologically refined way. It was this that Worringer attacked. Alois Riegl had explained function, material, and technique as subordinate in the work of art: Worringer handled naturalism in the same way (tr. 1953, p. 10).

Lipps' theory of aesthetic enjoyment, as interpreted by Worringer, means "to enjoy myself in a sensuous object diverse from myself, and to empathize myself in it" (ibid., p. 5). Then he points out that "the assumption that this process of empathy has at all times and at all places been the presupposition of artistic creation cannot be upheld. On the contrary, this theory of empathy leaves us helpless in the face of the creations of many ages and peoples." In other words, the theory does not operate in periods which do not follow the naturalistic principle and which cannot be fitted into "the narrow framework of the Graeco-Roman and modern Occidental art" (pp. 7, 8).

Worringer contrasts the process of empathy with the concept of abstraction. Riegl does not stress this; he refers to it only casually or by implication. For Worringer this concept stands at the beginning of artistic creation. He went as far as was possible in 1906. It is not important that Worringer considered the geometric style of the eighth and seventh centuries B.C. as a spontaneous invention of the Greek archaic period and the beginning of art, nor that, precisely on these grounds, he denied Riegl's assertion that art includes the work of primeval times.

More important is Worringer's essential insight that abstraction started with the beginnings of art. The material from the Aurignacian period was unknown when he first set down this theory.

Worringer explains the origin of the urge to abstraction by stating that "what we see here is a purely instinctive creation, that the urge to abstraction created this form for itself with elemental necessity and without the intervention of the intellect" (p. 19). There can be no doubt about this. It should also be kept in mind that he recognized from the beginning that "the evolution of artistic experience . . . appears simply as a thousands of years long disputation" (p. 34) between the need for empathy and the urge to abstraction. Later he elaborates: "The two poles of human artistic experience . . . are antitheses which, in principle, are mutually exclusive. In actual fact, however, the history of art represents an unceasing disputation between the two tendencies" (p. 45).

This endless interpenetration, this continuously shifting accent, with the emphasis now on one, now on the other pole, belongs to the essential dynamic laws of the human soul.

But how can the urge to abstraction be solved artistically?

Worringer believes that one possibility lies in what he calls "the exclusion of the representation of space," and another in "the approximation to abstract crystalline forms [in order] to deliver the object from its relativity and eternalize it" (p. 37).

His description of how primitive man reached towards abstraction in this way is closely tied up with the idea that art originated in "cosmic anguish." It is because "he stands so lost and spiritually helpless amidst the things of the external world, because he experiences only obscurity and caprice . . . that the urge is so strong in him to divest the things of the external world of their caprice and obscurity in the world picture" (p. 18). Pure abstraction becomes for Worringer the "only possibility of repose" (p. 44) in a threatening world picture. It means therefore an isolating process.

This detachment from confusing reality is connected with an "exclusion of the representation of space" (p. 37): with a negation of space. Everything must take place upon the plane surface: space is excluded. This explains how Worringer, almost in the same way as Riegl, sees ornamentation as the purest and most lucid expression of artistic volition. In our section "Space Conception in Prehistory," the present-day point of view will be noted.

Every generation stands before the future as before a curtain of mist. It becomes partially lifted only at rare moments and by rare individuals. One of these was Wilhelm Worringer. It is of secondary importance that some points of view have since changed. Vital only is the fact that here, for the first time, a theorist opened the gates without hesitation to the approach of a dynamically onrushing development. Matisse and his friends had shortly before recognized the artistic power of nonclassical art (especially Negro sculpture) and had drawn from it an enrichment of their own creative forms. Wilhelm Worringer, a scholar remote from the center of Western painting, definitely tore away the curtain of the classicist mentality, when he declared, "Ultimately all our definitions of art are definitions of Classical art" (p. 132).

14. FERNAND LÉGER: *"Pitchforks leaning against a wire fence." Watercolor, 1944*

"Our aesthetics is nothing more than a psychology of the Classical feeling for art. No more and no less." For the whole contents of the culture of our contemporary humanity "is founded on this Classical tradition . . . whereas, significantly enough, the complicated development of modern art no longer fits exactly into this ABC-aesthetics" (pp. 123, 124).

Worringer wants to widen the view for what he calls the transcendental art for which this ABC-aesthetics is no longer valid. He thinks in this connection of the art of "Gothic man, Ancient Oriental man, primeval American man" (p. 123). The position is the same, only the panorama has widened.

When Worringer published his *Abstraction and Empathy*, Picasso was working on his *Demoiselles d'Avignon.* Shortly thereafter Cubism formed its intangible transparent space. And in Munich, the same city in which Worringer wrote his book, Wassily Kandinsky, who was oriented more than anybody else towards cosmic space, gave the first hints of this direction in his *Concerning the Spiritual in Art*, first published in 1912 (tr. 1947).

Types of abstraction in contemporary art

Around 1910 abstraction again became a constituent element of painting. How this came about has been recounted many times and must here be taken for granted.

But a few words may be added regarding the constancy of the human mind in dealing with the problem of abstraction. Abstraction as an artistic means of expressing emotional demands had lain buried through centuries: pushed back into the unconscious. At its rebirth around 1910, the same types we found in primeval art again came to the fore.

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The first of these types involved simplification and concentration upon essentials in the nonperspective representation of an object —from inanimate matter to the human figure. In the contemporary movement, it involved moving away from the trompe l'oeil toward an artistic configuration. Externally, a picture of the decade of 1910–20 had nothing in common with the primeval abstract buffalo from Pech-Merle. Yet the same methods of eliminating detail has been used in both cases to achieve a greater strength.

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The result, called by Fernand Léger the transformation of a subject into an object ("du sujet à l'objet") can be instanced by one of his water colors, painted after Léger had been moved and angered by the sight of a deserted farm at Rouses Point, on Lake Champlain, New York, in 1944. The menacing teeth which protrude from sickle-shaped forms are in fact pitchforks leaning against a wire fence: a naturalistic appearance has been changed into a plastic form. The subject has become an object.

In differing degrees this process of abstraction can be found in the work of every artist during the highly formative period between 1910 and 1920. No matter whether the artist dealt with bottles, pipes, and tables or with human figures. No matter whether he is Picasso, Braque, Juan Gris, Ozenfant, or Le Corbusier. Even a construction such as the Eiffel Tower becomes transformed when Delauney reveals its emotional significance.

Many of the surrealists, from the early Chirico to Max Ernst, although they seemed to portray meticulously naturalistic details, are not exceptions. They built an imaginary universe out of fragments of reality, from which we are separated as if by an invisible curtain.

The second type of abstraction in primeval art involved the use of forms which had no direct relation with any existing object, such as the many abstract symbols which are dealt with at length in Part III. This is how the Dutch circle, with van Doesburg and Mondrian, and the Russian Constructivists used their squares and rectangles of pure color and their lines indicating force or separation.

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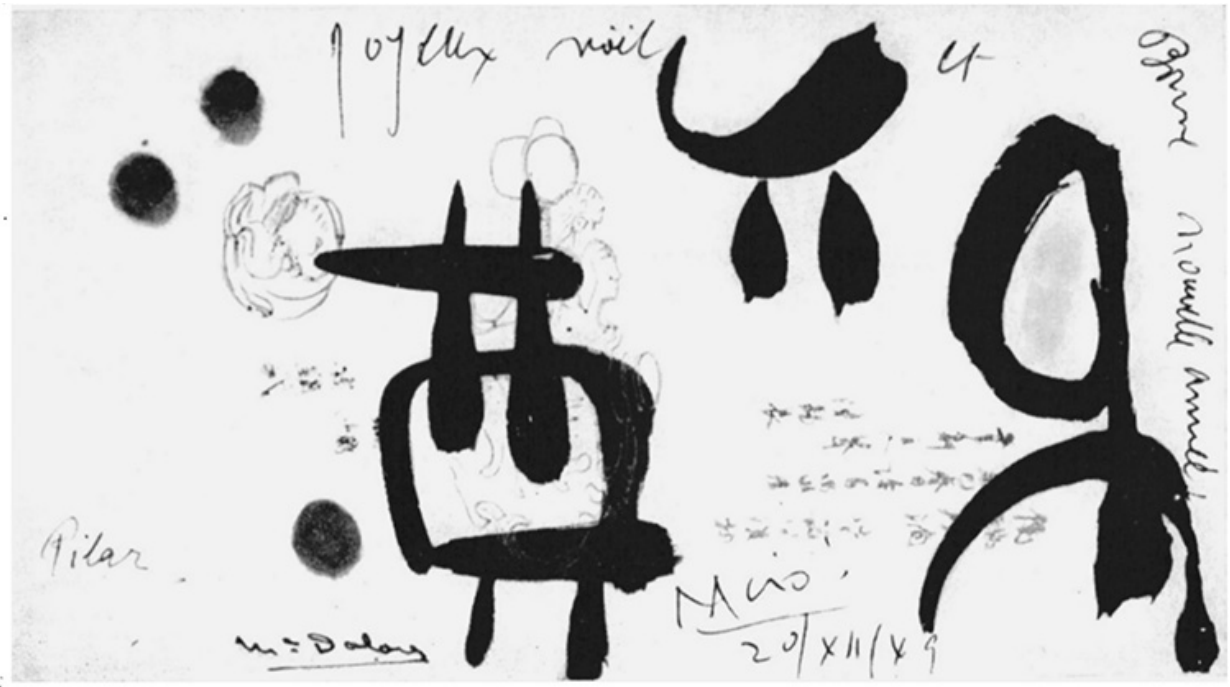
The third type of the use of abstraction was an intermingling of both former types: transformed objects and abstract symbols. This can be seen in the drawing on clay of a hind at Altamira, where parallel lines have been super-imposed over its body. In our own time this mingling of the two types can be seen in the work of many painters. In Léger's long series of *Divers* (1942 onward), elongated colored planes are superimposed over the human figures. In the paintings of Kandinsky, there is still another kind of relationship. We find variously an interpenetration of well-defined geometrical forms and straight lines with amorphic curves, swirls, and spirals.

below

The fourth type of abstraction, which goes so far that only the initiated can interpret its meaning, exists in the work of Joan Miró. If Miró were not so imaginative an artist, one would be inclined to say that he stands perhaps too close to prehistory. But this is no literary association. He, as no other, still has the abstract human figures of eastern Spain in his blood. In his art there lives again the imaginative power to invent new signs, new abstract forms for human beings —the power that existed in the rock shelters of eastern Spain during the second and first millenniums B.C. and that created those riddles of symbol for which there is no immediate explanation, now illuminated by Miró's incandescent use of color.



15. JOAN MIRÓ: *New Year's card for José Luis Sert, 1949*

TRANSPARENCY, SIMULTANEITY, MOVEMENT

Abstraction, transparency, simultaneity, and symbolization are means of expression which appear both at the dawn of art and today.

During the first two decades of this century, enormous complexes of paleolithic art were discovered. Their astonishing splendor was immediately made known through full and lavish publications. It often proved difficult for their explorers to recognize that a study of the approach of contemporary artists would be helpful toward understanding the inner meaning of the treasures they had unearthed. The reason is that each of us brings to a work of art the background of visual education that he himself has absorbed and the judgment and ideals that this implies. Over and over again we have seen that the approach to primeval art has been influenced by the nineteenth century's identification of art with naturalistic representation and its demand for a naturalistic explanation of the content. These have tended to constitute the final yardstick.

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This is why —as was stated earlier —the final phase of primeval art, when abstraction was dominant, was classified as degeneration, conventionalism, and similar derogatory evaluations. The same reasoning applies to the explanations given of the content of certain highly enigmatic scenes, such as that in the "well" of the cavern of Lascaux where the scene with a wounded bison, a man with a bird head, a bird on a staff, and a fleeing rhinoceros is described as if this were an anecdotal picture hanging in a nineteenth-century drawing room.

With the advent of contemporary art, aspects of human nature which had been buried for long ages reappeared. But their affinities with prehistoric art did not become apparent until much later.

In comparing primeval art and contemporary art, one may open the way to misunderstandings and to fashions that are quickly devaluated. Going back to the beginnings of art only makes sense when one probes the fundamentals: when one searches not for external likenesses but for comparative methods of representation.

It should not be forgotten that the first to look at prehistoric art with eyes unclouded by nineteenth-century standards was a German geologist, Wilhelm Paulcke, who was also a famous Alpinist and a pioneer of skiing. Thus, in every way, an outsider. In his book *Steinzeit Kunst und moderne Kunst — Ein Vergleich* (Stone Age Art and Modern Art —A Comparison; 1923) he came much closer to the nature of primeval art than the prehistorians and art historians of his generation. He did not classify it from the standpoint of perspective naturalism, and one will search in vain for such expressions

as “schematic,” “convention,” “perspective,” “proportion,” etc. These apply to prehistoric art criteria that are entirely opposed to its real content and intention.

16. WASSILY KANDINSKY: *“The Rider.” Woodcut, 1911*

above

Some of Paulcke’s arguments are now obsolete. He relied upon the famous treatise by Verworn, *Zur Psychologie der primitiven Kunst* (1908). Verworn held that naturalistic art came first and “at a later stage of development was followed by stylized abstract art” (Paulcke, 1923, p. 33). But the important thing about Paulcke’s book is that even in the formative period of modern art, the author possessed the courage and farsightedness to turn to the work of Kandinsky and Klee, artists much criticized at that time, to help him reach an understanding of prehistoric art. He used Kandinsky’s woodcut *The Rider* (1911), for example, to show “a similar technique and simplification in arriving at typical elements” (caption to Paulcke’s pl. 55). Both here and elsewhere in his book he based his arguments not upon superficial likenesses but on methodological comparisons: “as with Paul Klee and Kandinsky, among Stone Age men one finds indeterminate lines and signs in multifarious combinations” (p. 43).

Finally Paulcke realized that the way primeval art was presented was rooted in its symbolic content. It is astounding how, after a number of comparisons, he came to the essential point: “This very early trodden path, which is now being trodden anew, leads toward symbolism” (p. 45).

The kinship between primeval and contemporary art was further underlined when the real features of primitive and prehistoric mentality became recognized, although disguised with nineteenth-century labels. We are here referring particularly to the work of Lévy-Bruhl, who, starting as a positivist, penetrated the *mentalité primitive* with an extremely logical Aristotelian mind, and to G. H. Luquet, who found the real approach to primitive art though he gave it the grotesque label of "intellectual realism."

APPROACH TO PRIMEVAL MENTALITY

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As early as 1871 E. B. Tylor, in his still-valuable *Primitive Culture*, the work of a lifetime, had introduced the notion of a primitive mentality based on animism: "the doctrine of human and other souls" subsisting in an all-animate nature.

Nobody, however, has penetrated the *mentalité primitive* with such care and prudence as Lévy-Bruhl in the six volumes of *La Mythologie primitive* (the first published in 1910) and his *Carnets* (1949), published ten years after his death. With the tools of the *nexus causalis*, he discovered the dimension of the *expérience mystique*, and incidentally, abolished once and for all the Darwinian and Spencerian theories of progress.

In his *Carnets* — perhaps more revealing than his larger volumes— Lévy-Bruhl circled relentlessly around his most important concept, participation. He was no conqueror. He had all the inhibitions of a logician who feels the necessity of proving things which arise from the *prélogique* state of mind —or, as we would perhaps say today, from the irrational mentality. But in his *Carnets*, Lévy-Bruhl had already given up the notion of a prelogical state of mind and recognized that another form of logic governed the conception of primitive man. The main thing is that Lévy-Bruhl continued to go forward, as M. Leenhardt says in his introduction to the *Carnets,* "à la rencontre des catégories oubliées" : and it is this that matters.

But if only Lévy-Bruhl, with his talent for penetrating into almost inaccessible complexes and his great care in the exploration of myth, had had the daring philosophical perception of his contemporary Henri Bergson —let us only consider Bergson's psychic enlargement of the notions of time and duration —we might today have a better comprehension of the meaning of prehistoric art. Yet we owe a special debt of gratitude to him: his carefully sharpened weapons of logic brought to light a mentality in which image and body, thought and reality, were infinitely more closely interwoven than today.

Today sociologists have discarded Lévy-Bruhl's works as too unspecific. They favor elaborate statistical methods, using punch cards and computors — for instance, G. P. Murdock's researches into the behavior patterns of primitive societies.

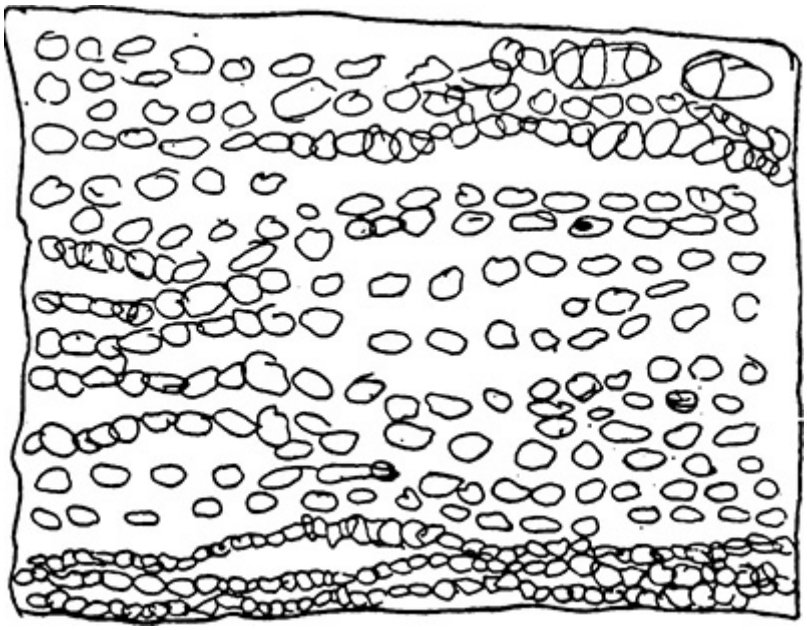
The other French savant, G. H. Luquet, is even more important for our purpose. The main chapter of his small but extremely penetrating book *Art primitif* (1930) is devoted to the *réalisme intellectuel.*

What is this intellectual realism?

Luquet, who started as a philosopher and a psychologist, methodically compares the meaning of children's drawings, primitive art, and prehistoric art. In this book he develops the principles of contemporary painting, although he had not the faintest idea of its existence. Nobody has shown better than he the similarity of principles that exists between the early drawings of a child and primitive art of all types. This is all the more astonishing and convincing as Luquet's own artistic outlook is bounded by the single point of view of the Renaissance and, above all, by the nineteenth-century belief that all art must be tied to a naturalistic representation of the object. Despite this, his sharp eyes have revealed the methods used both in primitive art and in children's drawings. He showed their inner contrast to nineteenth-century representational art and, quite without realizing it, their affinity to modern art. True statements are made quite unconsciously, because he ties them to notions taken from the artistic convictions of the nineteenth-century ruling taste. One sentence as illustration: "To the man of today, a picture is understandable when it reproduces that which his eye sees; to the primitive man when it expresses that which his mind knows" (p. 167).

below

As an example of the *réalisme intellectuel* of the child he gives the following description of a drawing of a potato field made by a Dutch child of seven. "He draws no part of the potato field that the eye can see —that is, the potato plants themselves — but only invisible elements: the tubers hidden below ground, and a feature that has no objective reality but is simply an abstract conception, the boundary around the field" (p. 68).



17. Potato-field: drawing by seven-year-old child

Then follows an astonishing and completely unconscious definition of the principles of contemporary art: "The child's drawing does not reproduce the actual object that he has in front of him, and which he often does not even look at, but it gives a representation of the object as he sees it in his mind, an aspect that I have called the 'internal image' (*le modèle interne*). This internal image consists of a spontaneous mental selection from among the visible attributes of the object. One can postulate the existence of a mental eye which institutes a sort of hierarchy in selecting from among the elements presented to the visual eye. Only those elements considered absolutely necessary by the artist are retained and presented in the painting. The finished work may contain aspects of the model which cannot be seen, while others which leap to the eye may be entirely neglected" (p. 69).

TRANSPARENCY IN PRIMEVAL AND CONTEMPORARY ART

Transparency is used in two principal ways:

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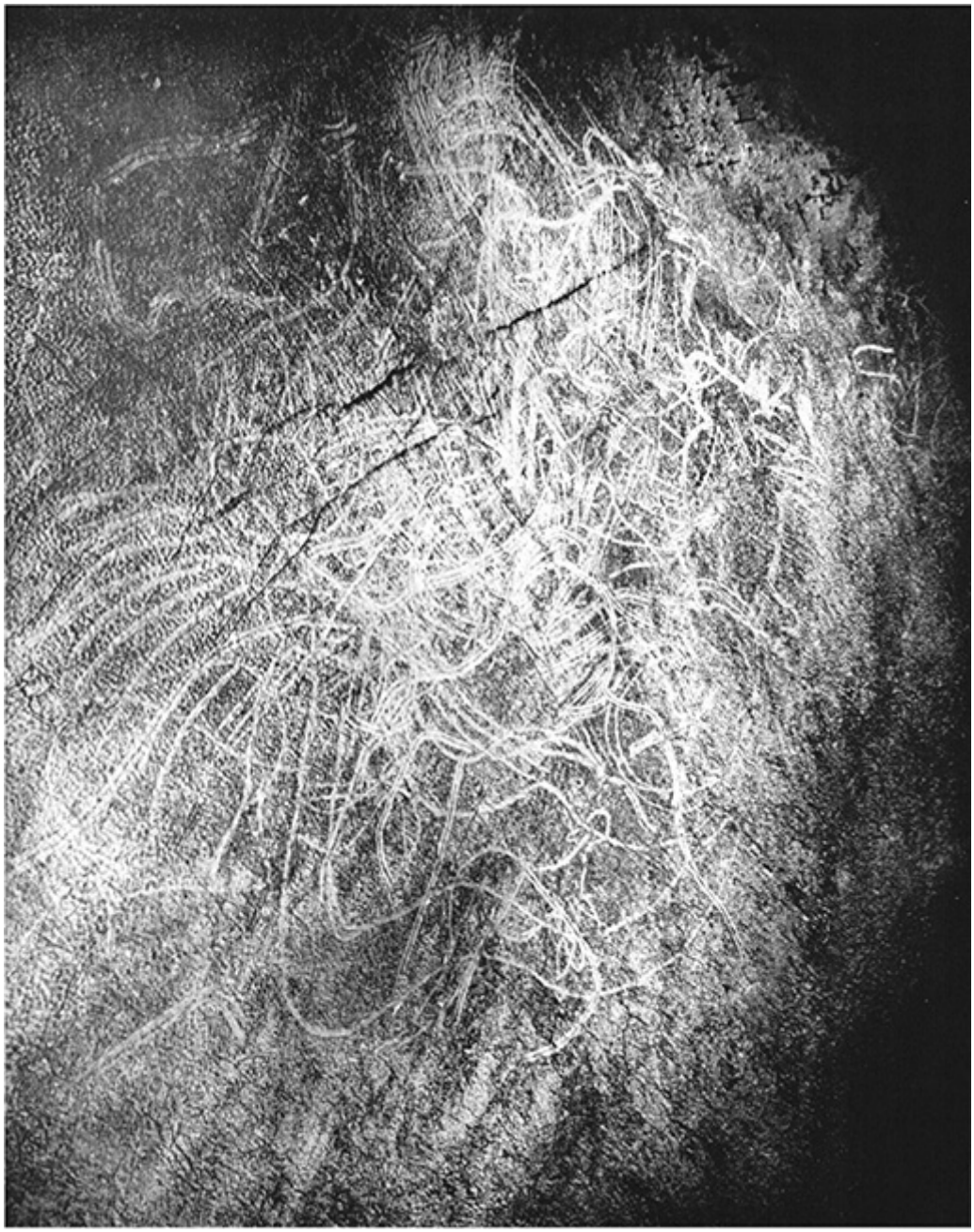
The first is the superimposition of different configurations —bodies or lines — one over the other, without harming or obliterating any of them. A simple example of this method is the clay finger drawing of a hind at Altamira, where the body is crossed by undulating lines. A more elaborate instance is the simultaneous interpenetration of lines over and under the head of an animal at Hornos de la Peña (Santander).

The second way is to make a body transparent, thus portraying both its inside and outside simultaneously. This occurs in Magdalenian art, is very frequent in primitive art, and recurs today in contemporary art.

The superimposition of bodies

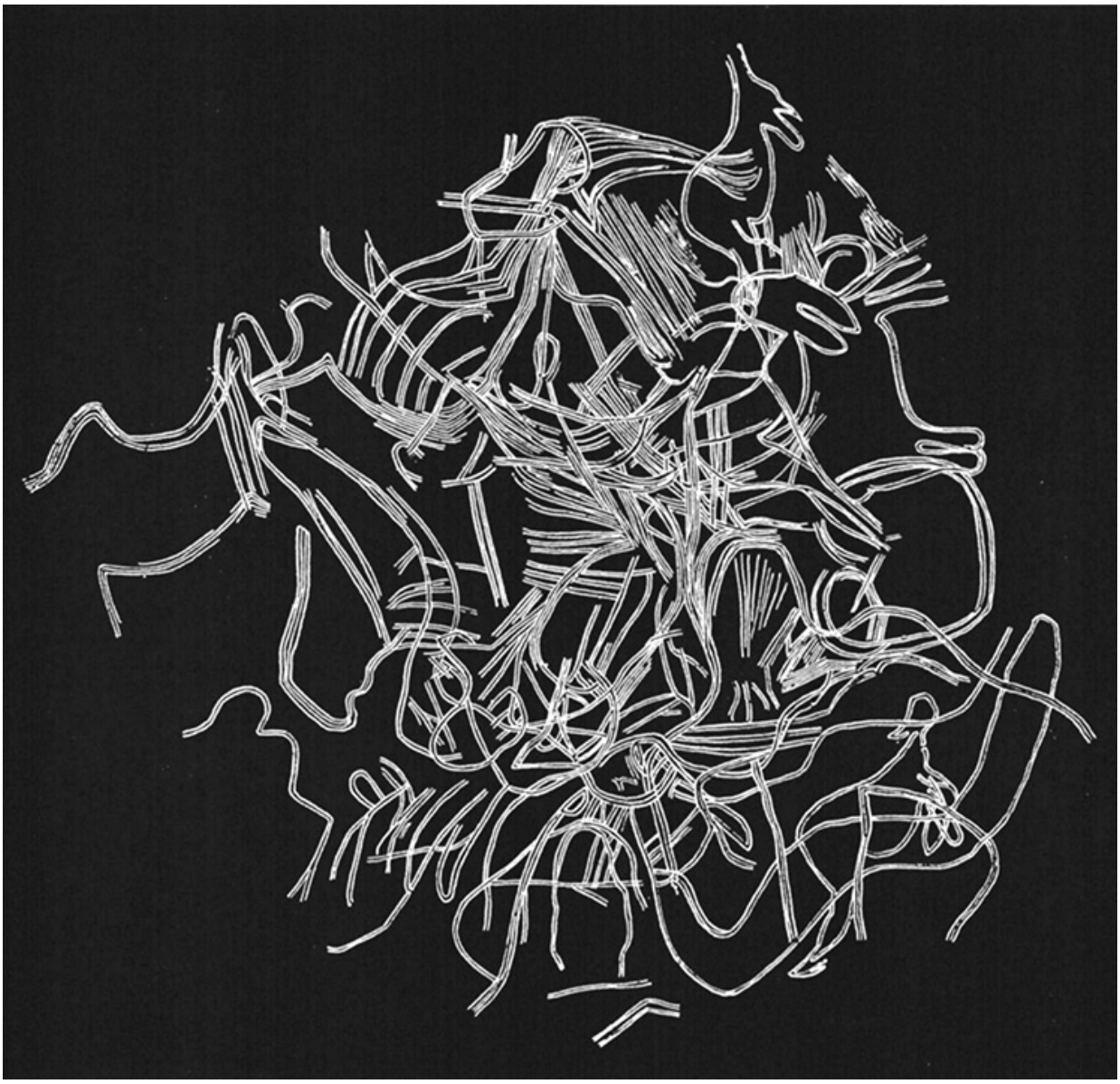
This kind of transparency is often used both in primeval and in contemporary art. It is displayed on a large scale in the Hall of the Hieroglyphs at Pech-Merle, near Cabrerets (Lot). This cave temple or *grotte-temple,* as the Abbé Lemozi calls it, is about thirty kilometers from Cahors, in southern France. It has no arena of frescoes as at Lascaux, nor anything like the low ceiling of Altamira with its many protuberances covered with bison and other animals of enigmatic significance. But, taken all in all, Pech-Merle is the most magical of the prehistoric caverns. Even in recent years, amazing new discoveries have been made: scenes with fabulous animals —a lioness-queen, for example— never seen in any other place.



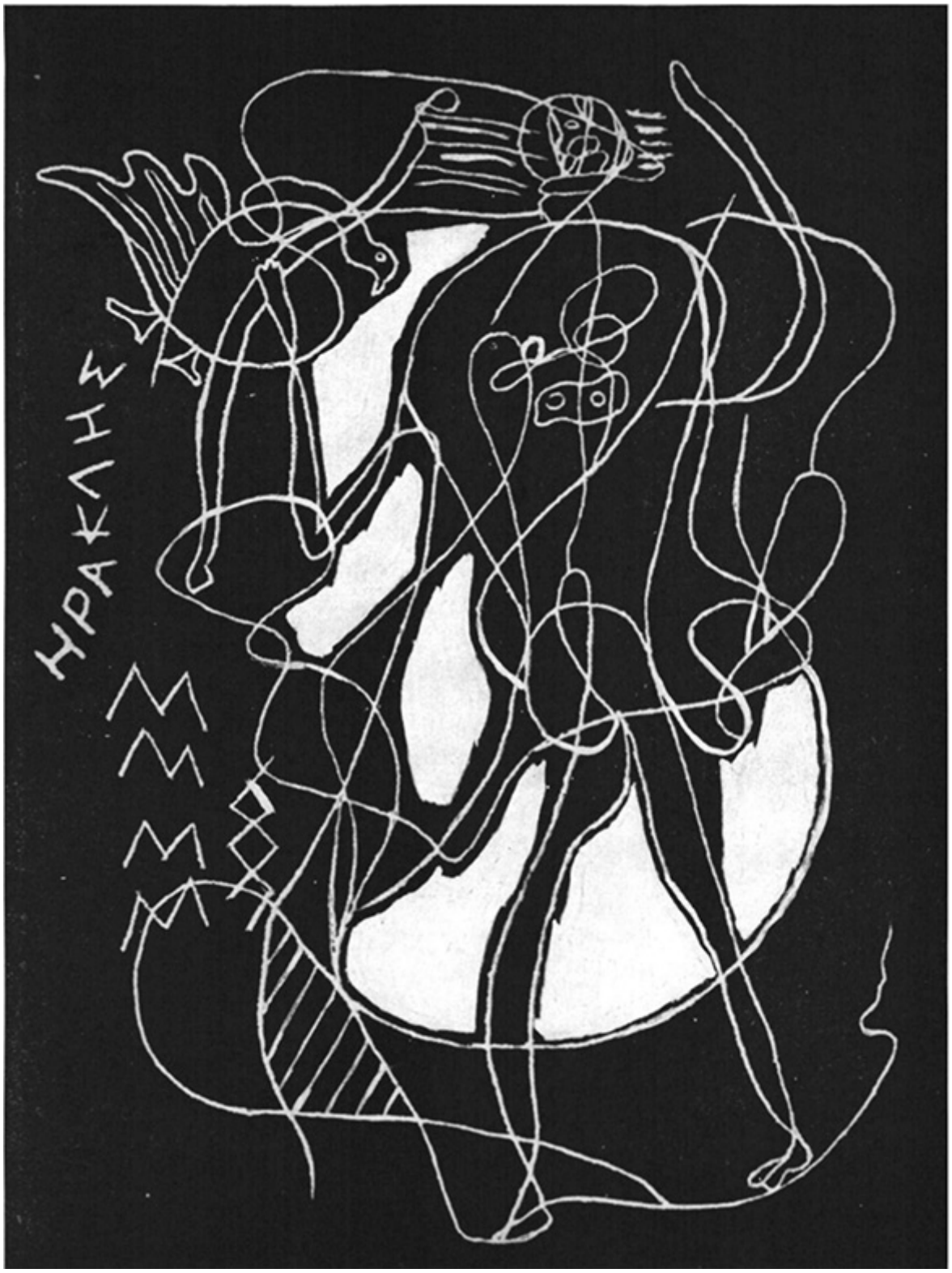
18. PECH-MERLE (*Lot*): *Ceiling of the Hall of the Hieroglyphs, with clay finger drawings*

plan after 538

In the center —if one can use this expression for the complicated subterranean caverns of Pech-Merle— there is a high vaulted hall with a fantastic rock pillar and stalactites. This natural setting was perfectly adapted to form a great sanctuary in which different parts, at different levels, were used by men (maybe even by different races), at different periods, to create their own sacred shrines — without ever disturbing the shrines created by bygone generations. How long the religious use of this cavern continued, whether four, five, or ten thousand years —from the Aurignacian until the Magdalenian period or even later —it is useless to ask.



Drawing by Lemozi (*in negative; cf. fig. 18*)



19. GEORGES BRAQUE: *"Hercules and the Stymphalian Birds." Engraving in blackened plaster, 1932*

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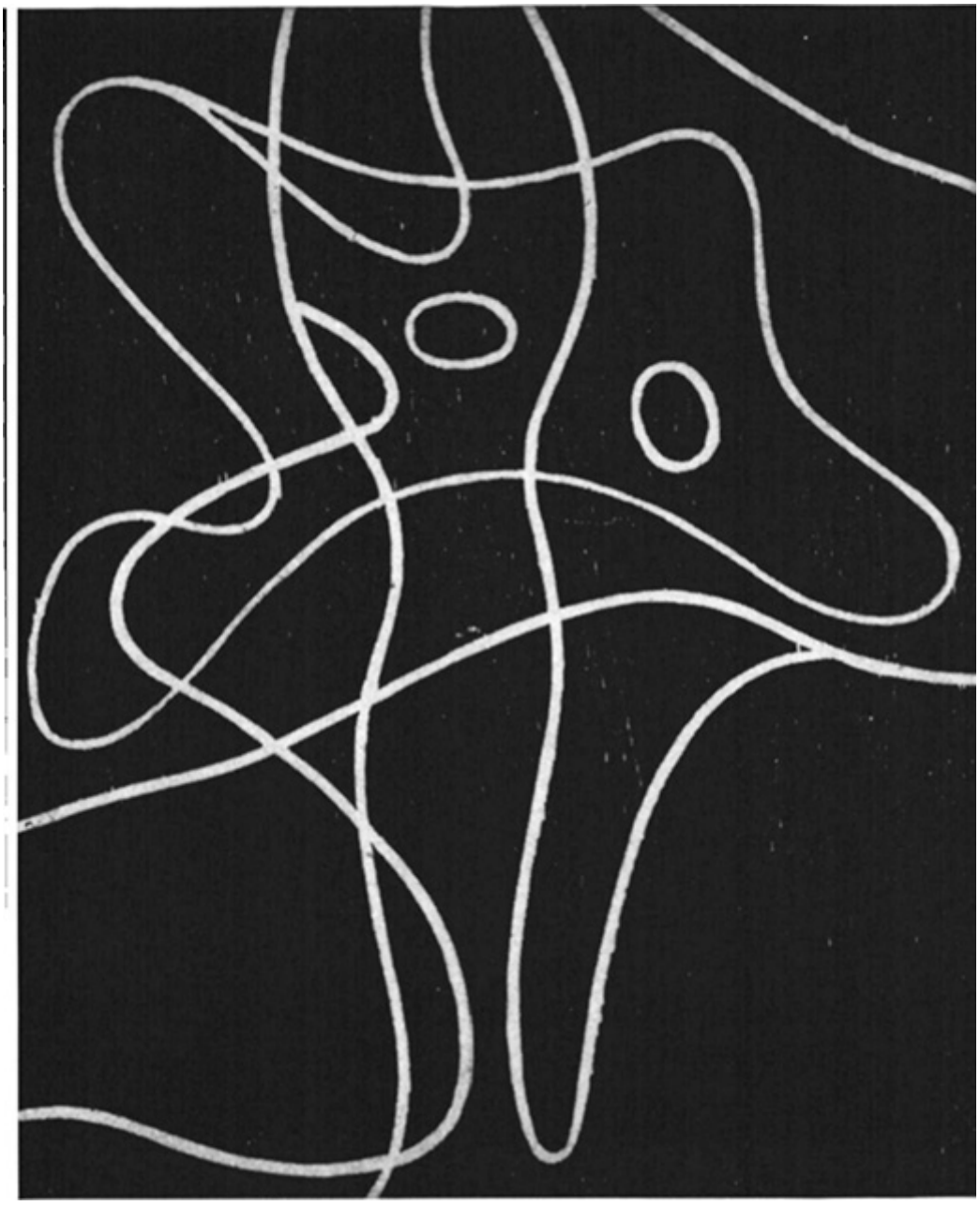
The background of this high hall is perforated by two natural galleries. On the ceiling of the upper gallery is spread a large-scale manifestation of one of man's earliest

artistic experiments. Rightly did the Abbé Lemozi baptize the place the Hall of the Hieroglyphs. No other document of Aurignacian times exists which expresses the fundamental conceptions of the time with such intensity. To our eyes, especially at first glance, this ceiling with its crisscross lines seems to have no significance at all. Then they appear: superimposed, drawn by fingers in the soft clay (soft and pliable even now), with no dominant direction, crossing and interpenetrating one another—mammoths, felines, and the heads of horses; also female figures (without head at the top of our picture and, again, with a bird's head at the bottom). The figures' limbs are reduced to mere stumps: everything is neglected except the attributes of fertility—the breasts and the swollen belly. During two long months, the Abbé Lemozi lay ("le dos cloué sur la roche") and redrew every line of the forty-five square meters in its natural size, at the same time disentangling many of the interwoven figures.

Aurignacian man gained magic possession of coveted animals by drawing their outlines in the darkness of the caverns, illuminated only by a flickering torch. In this way his art came into being as a direct response to his inner sight. A creature, ignorant of himself but closely linked with the forces of the cosmos, was here at work. Both the rough pictures of Pech-Merle, drawn simply with the finger, and the highly defined and multicolored bison of Altamira come to vivid life only when they leap out from the darkness. When the electric flash bulb tries to catch them, they fade and flatten, lose color, form, and movement. This, by the way, is one of the great difficulties in attempting to approach prehistoric art with mechanical instruments.



20. HANS ARP: *"Configuration." Lithograph, 1927*

21. LES TROIS FRÈRES (*Ariège*): *Super impositions of animals and other figures on rock. Drawing by Breuil* (*in negative*)

left

When the contemporary artist tries to seize hold of some particles of his inner life, he also has to turn his eyes inward. Once, I showed the drawings of Pech-Merle to Hans

Arp, and he confessed that he and his wife often drew their curved interpenetrating lines with half-closed eyes. Later, he wrote me the following:

"Now, under lowered lids, the inner movement streams untainted to the hand. In a darkened room it is even easier to follow the guidance of the inner movement than in the open air. A conductor of inner music, the great designer of prehistoric images, worked with eyes turned inwards. So his drawings gain in transparency; open to interpenetration, to sudden inspiration, to recovery of the inner melody, to the circling approach; and the whole is transmuted into one great exhalation."

Picasso expressed the direct projection of the inner light which commands the artist's hand: "If you paint, close your eyes and sing."

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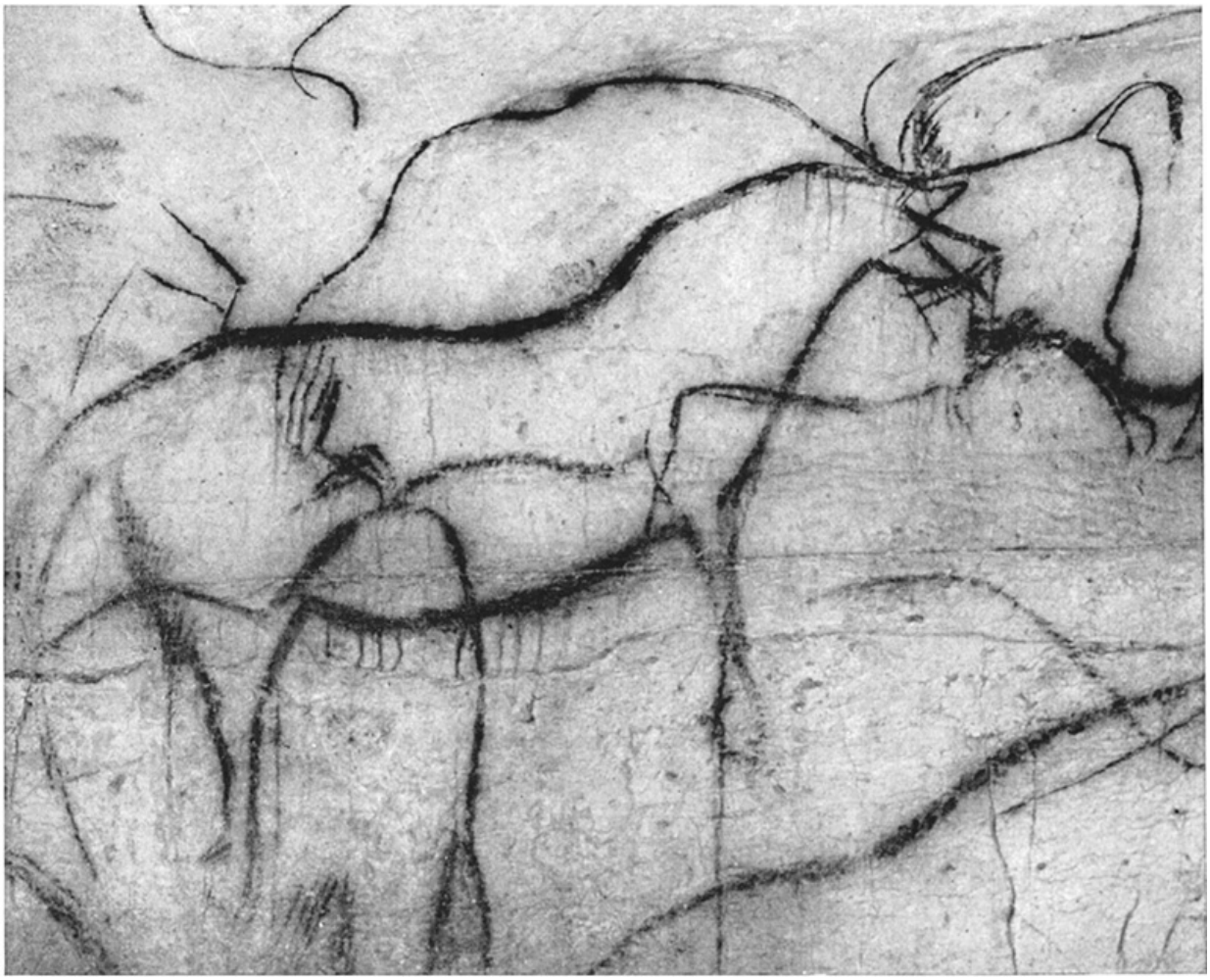
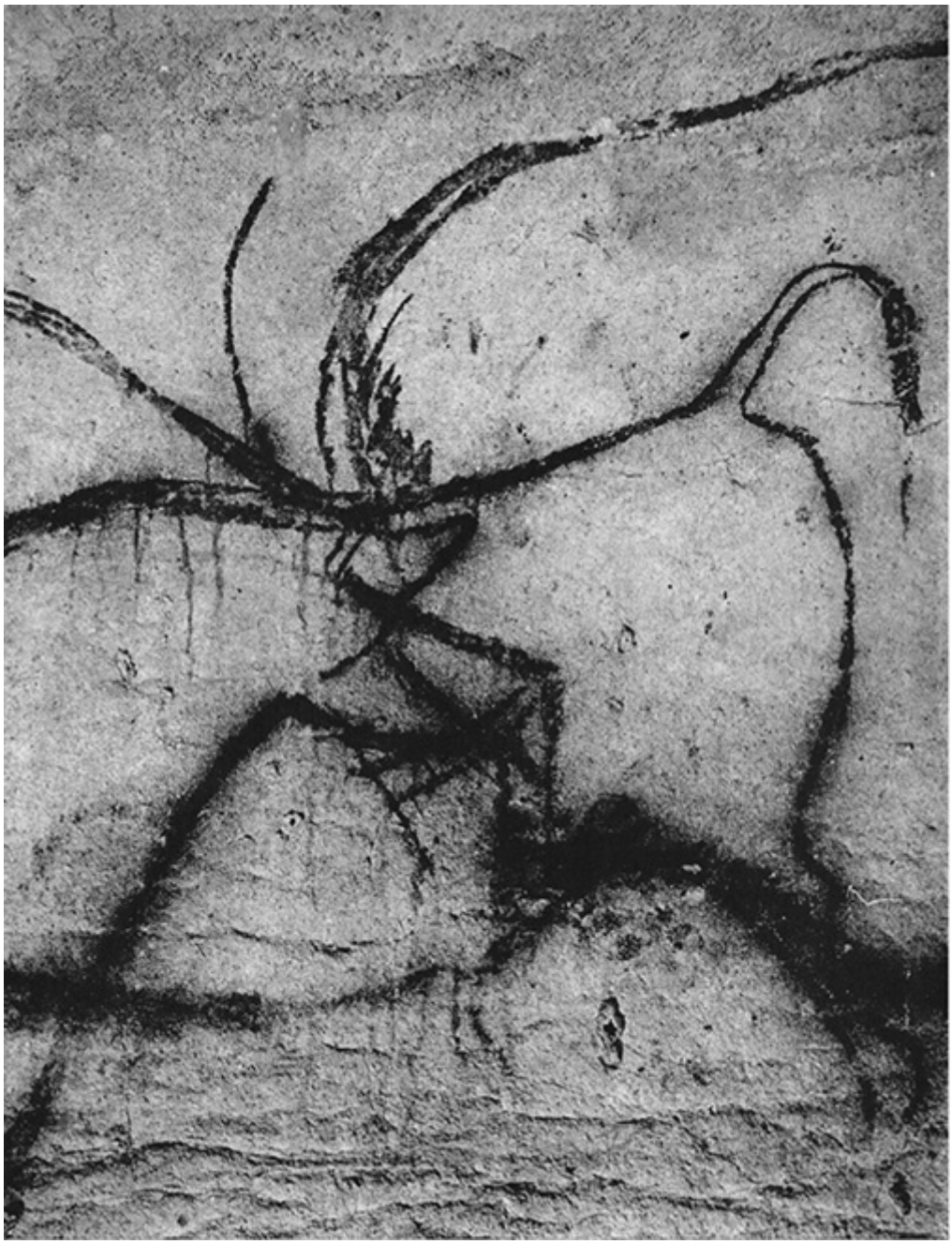
Georges Braque, one of the finest of French painters, is also deeply devoted to the pure line as the most direct outlet for movement and irrational expression. The bold ink drawings of his *Cahier* (1948) demonstrate how the line can be used to communicate unfathomable transparency. This is even more clear in his illustrations for Hesiod (around 1932), the lines engraved with a sharp instrument moving freely through the yielding surface of a blackened plaster slab. To communicate simultaneously the various actions Hercules had to perform in order to kill the brazen-clawed Stymphalian birds, lines and movement are superimposed in an endless flow. The pattern they form is not logical in all its details, neither can it be always elucidated by reasoning. Just like the ceiling of Pech-Merle, it appeals directly to our senses.



22. PECH-MERLE: *Chapel of the Mammoths. Central figures of horse and bison*



23. PECH-MERLE: *Chapel of the Mammoths. Detail of central figures*

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When the art historian Carl Einstein tried to approach the artistic procedure of this artist, he had to use descriptions that can be applied almost equally to prehistoric art: "psychogramme . . . le devenir hallucinatoire . . . mariage des éléments dissemblables." "We see in Braque the birth of a new figuration by simultaneity of signs . . . in the psychogram he marries heterogeneous elements and combines them into a single vision. . . . The structure of his figurations does not comply with any accepted order, but follows the train of hallucinatory thought. . . . The irrational mentality has thus reacquired immense force and has become again the dominating and decisive factor. I refer here to Braque's illustrations of Hesiod" (1934, p. 127).

The transparent superimposition of animals and human figures, spreading out in all directions, appears several times in the engravings on the rock walls of the cavern of Les Trois Frères (Ariège). Their superimpositions, inextricable to the eye of the normal beholder, have been carefully deciphered by the Abbé Breuil and the Comte Bégouën. Sometimes the figures were so intensively superimposed that several seasons of work were needed before the lines could be followed through and identified as far as possible (Breuil, 1952, figs. 125-29).

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One of the panels, upon which a number of figures are concentrated in a very small area, contains a quasi-mythological scene with a man, wearing a bison mask and playing upon a musical instrument, driving before him hybrid and composite animals.

after 398, 56

Not far from the great hall of Pech-Merle with its central pillar of rock, there is a shallow recess occupied by a great mural over twenty meters wide. To the left the recess is terminated by a low rock arch within which a funnel-shaped niche sinks back into the darkness. Above this arch curve the huge forms of giant mammoths. In thick black outlines, a centimeter or so in width, a great panorama of animals unfolds against the white background, partly covered by transparent layers of stalactites. In the center of this so-called Chapel of the Mammoths are spread out the most coveted animals —as if seen in the African hunting grounds. Sometimes the huge beasts appear like a chain of mountains, as when the hunter first discerns, in the far distance, the humped lines of their backs against the horizon. Sometimes they are conceived as complete individuals: such as one furiously stamping bull bison. In the very center of the picture a great horse stands quietly. All details are drawn with unerring assurance and with the utmost condensation. The long thick pelt of the ice-age mammoth is indicated by a few lines, but small details are sedulously brought out, like the paired nostrils of the mammoth's trunk.

All the animals are different in size, and different in importance, and they stand upon different levels. None erases the other. They overlap one another in transparent curving lines. All exist simultaneously. None are robbed of the right of rebirth. An immense surety of line has developed between the Aurignacian ceiling of the Hall of the Hieroglyphs and this Magdalenian Chapel of the Mammoths.

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In Picasso's *Guernica* the main heroes are animals of two kinds: symbolic animals —the bull and the tortured horses. They overshadow the human tumult around and below them. This is very curious and without precedent in our time. In a study for *Guernica* dated May 2, 1937, the head of the horse is brought in much closer relation to the bull than in the final picture. In a detail of the Chapel of the Mammoths, the head of the horse standing in the center of the picture meets the forceful line of a bull's shank

and mounting tail and the curve of a mammoth's back: all transparent, all existing in and within one another. Comparing this detail with Picasso's sketch for *Guernica*, we must grant the Magdalenian artist the greater force of line.

Transparency of bodies

The most usual way to give a simultaneous picture of both the inside and the outside of something is to show the thing itself as transparent by delineating its outline and then depicting its interior. In primitive art, anthropologists have dubbed this "X-ray." In contemporary art, it has become an accepted practice. It satisfies the need to express interior and exterior aspects of an object at the same time. In primeval art, as well as among primitive peoples, the significance of a simultaneous representation of the interior and exterior was of far greater import. It entered the realm of the potent symbol, the realm of hunting rites and shamanistic magic.

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Among existing primitive peoples one still finds animals represented with one part of their body transparent and the rest solid. A line runs from the mouth of an animal, following the throat until it ends in a circular form. Such lines have been termed life lines, as they symbolize life. "This line with its circular figure occurs on animal figures throughout a large part of the Norwegian and Swedish rock-art region and has been explained on the background of hunting magic rites of the Ojibway Indians. Here the feature is interpreted as the life line and the heart which symbolizes the live game that is to be killed with the aid of magic" (Gjessing, 1944, pp. 57, 58).

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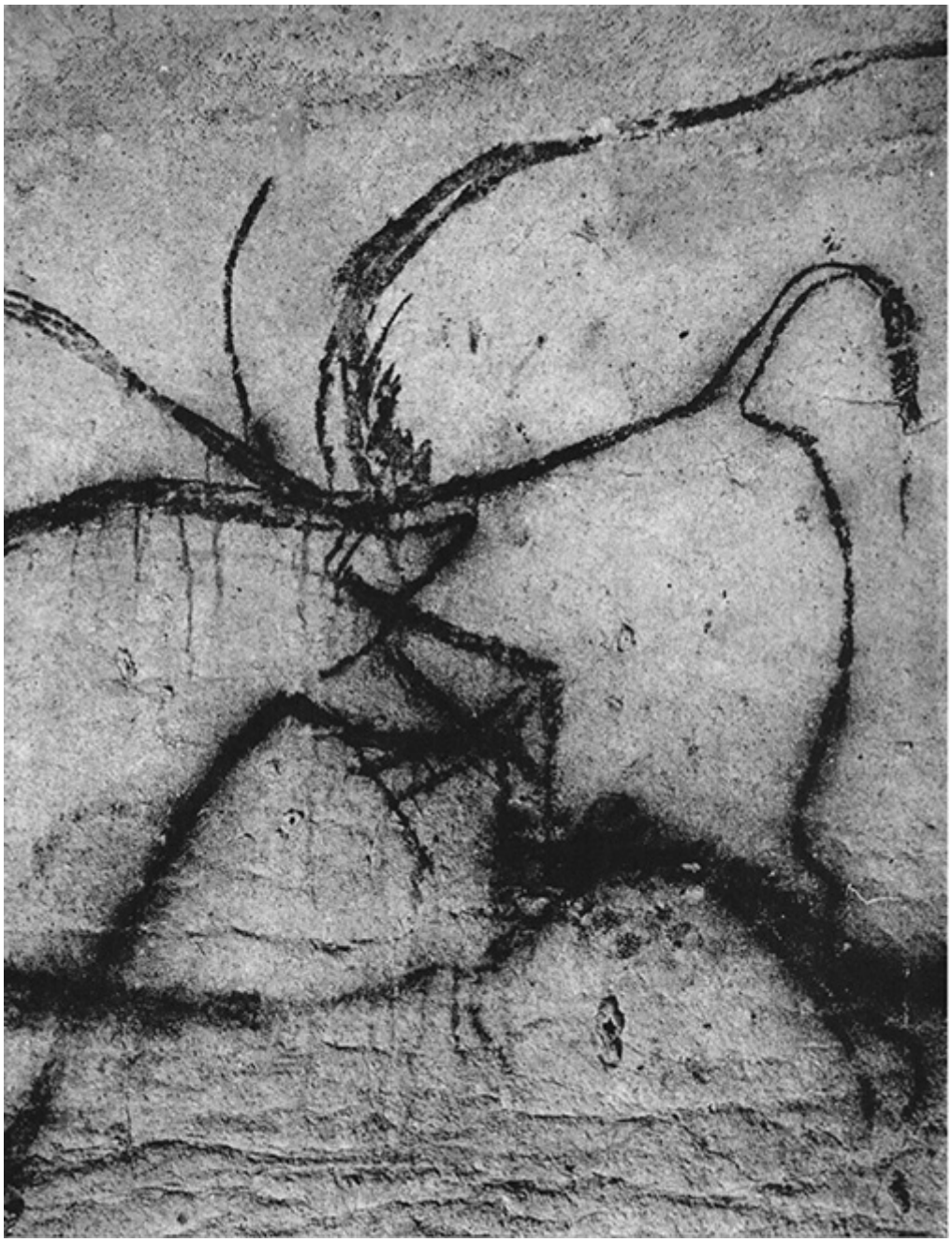
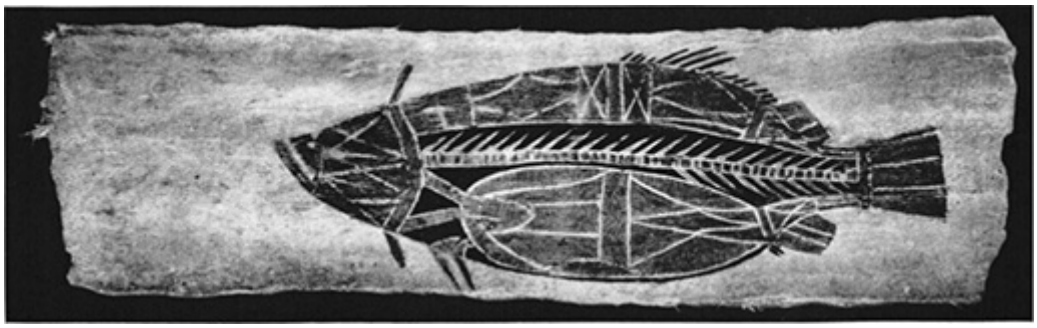
Among the examples assembled by Gjessing is an American Indian drawing that shows the animal's heart transfixed by a feathered shaft. A line drawn across its body separates the transparent and solid parts of the body. Even in the present century the handsome pottery vessels of some American Indians are adorned with this kind of representation.

below

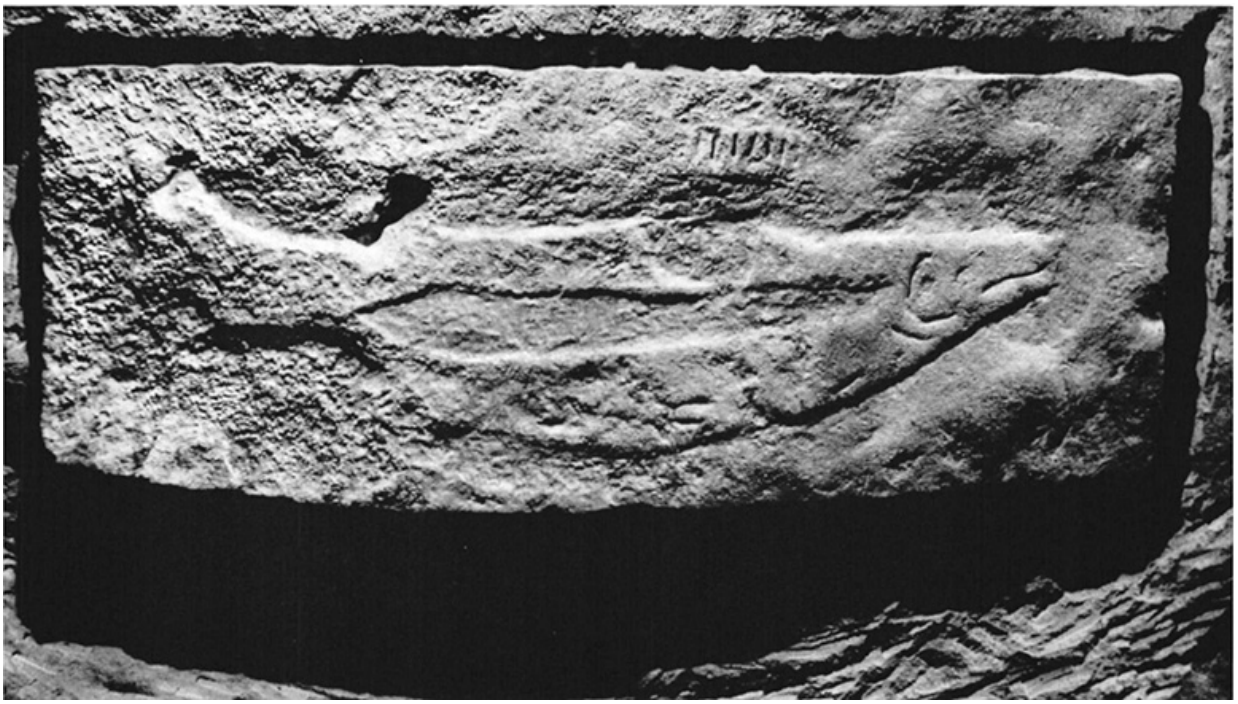
The use of transparency in the sympathetic magic of hunting rites is widespread: it exists in the early rock art of Norway and Sweden; in China and Japan; among the circumpolar peoples; among the American Indians of Arizona and New Mexico. The almost worldwide spread of this method of depicting animals is by no means confined to existing primitive peoples: its origins reach back with certainty to the Magdalenian era, perhaps even to the Solutrean or the latest phases of the Perigordian. A bone engraving from Lorthet (Hautes-Pyrénées) shows the digestive organs of a fish through its outer covering of scales. Only the forepart of the fish still exists. It is mostly represented from the outside: the head and upper part of the back. Only the lower part of the body is transparent.



24. LORTHET (*Hautes-Pyrénées): Forepart of a fish engraved on bone;* L. *8.5 cm.*

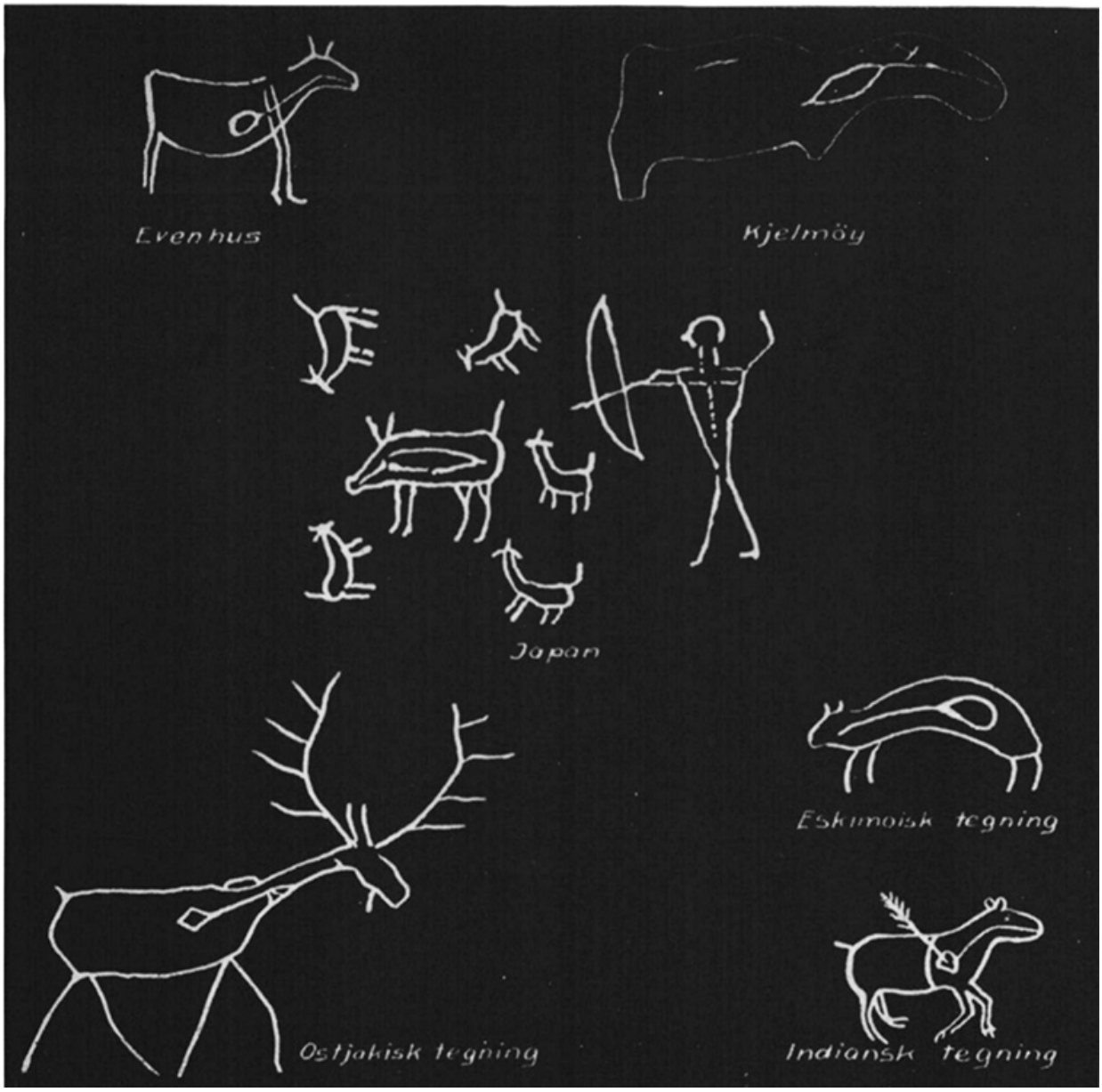


25. KAKUDA TRIBE, *Australia: Bark painting of a giant barracuda with transparent organs*



26. GORGE D'ENFER (*Dordogne*): *Flat relief of salmon on ceiling of the Abri du Poisson.* (*The frame was cut by a would-be thief*)

left



27. Primitive drawings of life line. From Gjessing, 1944 (*in negative*)

In a very similar way, in our own day, an Australian aborigine from the Northern Territory (Kakuda tribe) depicts a giant barracuda partly from out side and partly from within. “Along the back a line of flesh is indicated. Below this there is the backbone, and below this again the internal organs” (Spencer, 1914, p. 438).

What was the reason for showing simultaneously the inside and outside of an animal? The inner organs are displayed stretching from the mouth through the throat to the stomach and often farther on, sometimes drawn with an excellent knowledge of anatomy. No clear-cut explanation is available for this use of transparency, but hunter’s magic is almost certainly involved. Vital organs are depicted so that the hunter can gain a hold over the life line.

above

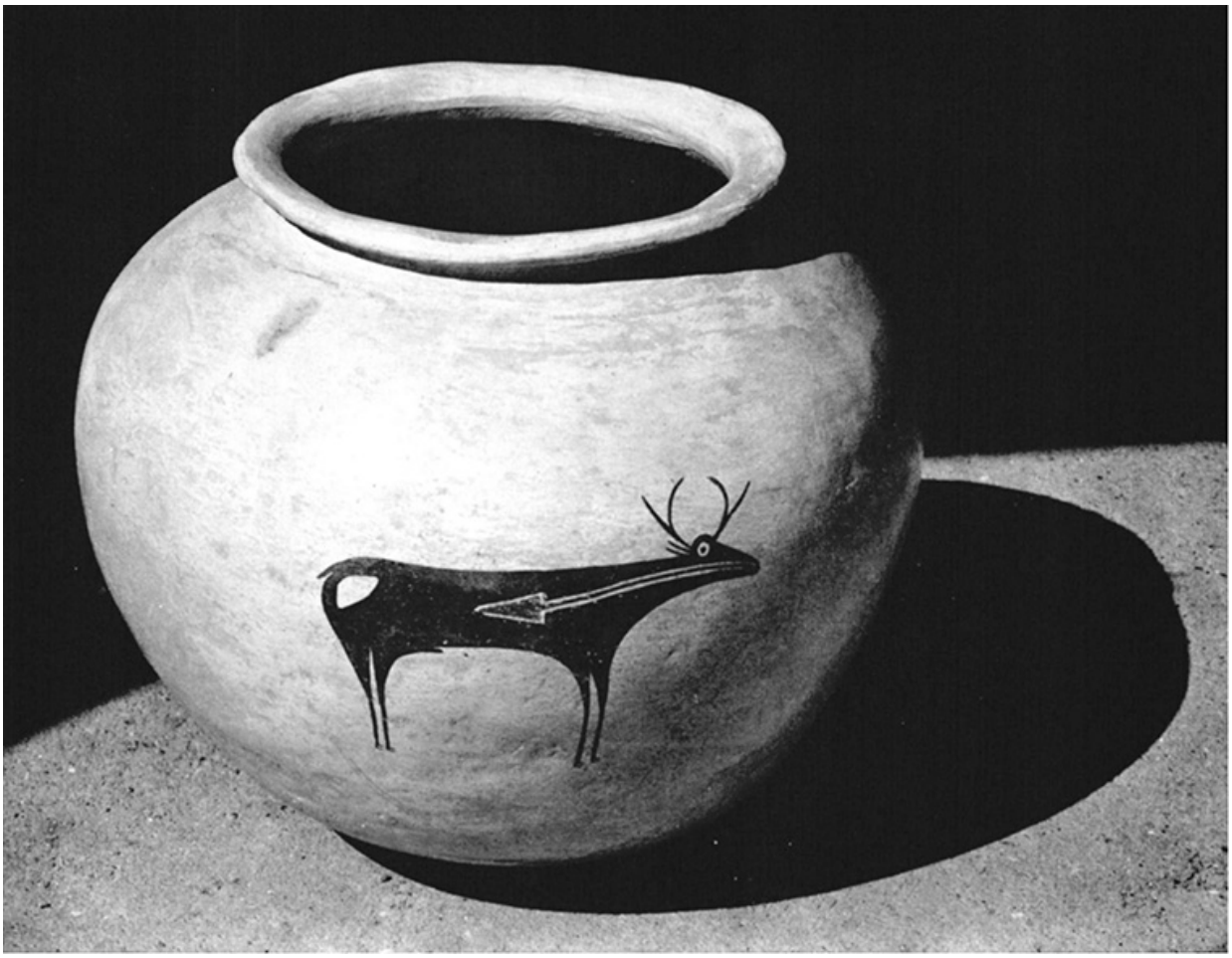
It may be that the desire to show simultaneously an animal's inside and outside has its roots even so far back as the late Perigordian or Solutrean era. On the low ceiling of the Abri du Poisson, a miniscule rock shelter in the Gorge d'Enfer, near Les Eyzies, a large salmon (1.05 m. long) is incised. The head is shown in detail. Above it is a row of vertical parallel strokes, similar to those on the horn held by the Venus of Laussel. Below this, and connected with it, is the head of a bird of prey. A channel-like depression extends the length of the fish, starting at the head, where five very small cupules are aligned above it, and ending in a point near the anus. At the important situation where the relief was found, on the very brink of the Vézère River, it seems possible that such a specially visible channel through the body of this salmon may signify early stirrings of transparency: a grasping after the life line. (The disturbing frame deeply incised around the fish is due to the fact that a fisherman from nearby Laugerie Haute tried to sell this relief secretly to a German museum, but was caught in the attempt to hew it out.)

64

In 1923 Paul Klee rekindled this use of transparency to express an animal tragedy. In his drawing *Getroffenes Muttertier* (Pierced Mother Animal) he traces out her life line. At the point where it has been hit by the deadly arrow her whole body is twisted by the pain. Her fur bristles. Her two offspring still seek hungrily after her full breasts.

66

The transparent body becomes easily understandable when it symbolizes fertility by depicting an offspring within the belly of a gravid animal or an infant within a pregnant woman. Luquet regards transparency as a distinguishing feature of *réalisme intellectuel* and notes that the interior of an opaque object is often represented by a child "as if it had, on this occasion, become transparent. All elements that the child artist wishes to portray must be presented at the same time, although in reality they would only be visible successively or from different points of view" (1930, p. 95). Luquet brings together a Dakota Indian drawing showing the baby inside a woman's body, a Spanish ceramic with a bird inside another bird, an Eskimo drawing of an infant whale within its mother, and a child's drawing showing the chicken inside an egg.



28. ZUÑI INDIANS (*New Mexico*): *Drum jar* (*post 1925*)

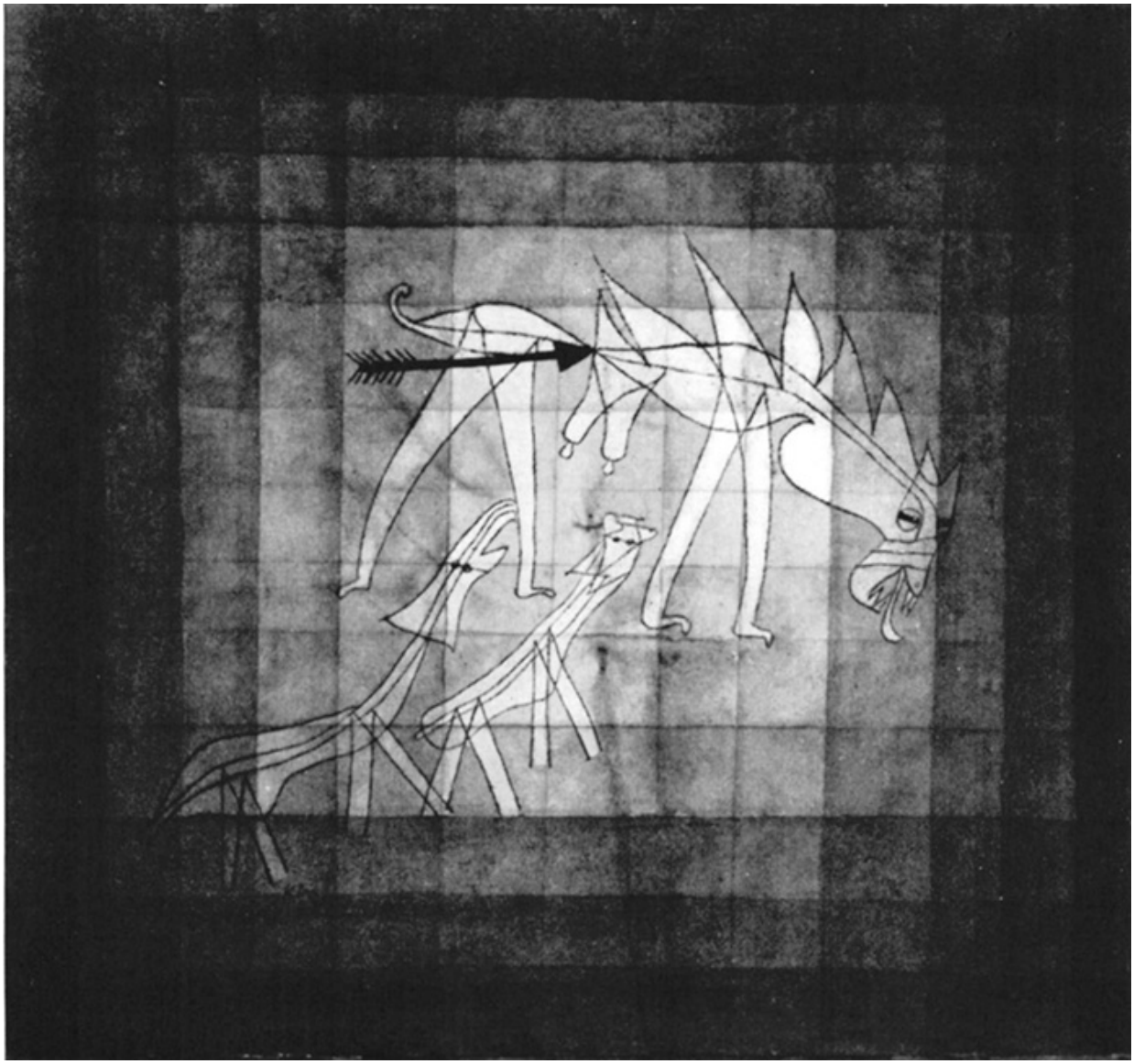
67

This kind of transparency is also sometimes found in the first high civilizations. Ostraca (from the Greek for oyster shell) are pieces of broken pottery, often found in Egypt, on which are drawings of various kinds. One such ostracon shows a frontal drawing of a mother with an infant inside her —all expressed in rounded curves.

67

In the present century, Marc Chagall painted a colossal pregnant woman, standing upright with the child in her womb seen through a transparent oval opening in her belly (Sweeney, 1946, p. 27). Of greater poetic force is Chagall's well-known painting, *The Cattle Dealer* (1912). The dealer, seated on his cart, which shows only two of the four wheels, has his head turned backwards in *perspective tordue.* He is driving a gravid horse, the infant foal transparently visible within her. In this painting the artist did not merely call to mind memories of his childhood in a small village near Vitebsk, but he also sanctified them through the new means of expression of contemporary art. Simultaneously he revived the use of transparency to portray a psychic situation, too involved to be depicted by mere naturalism. Paul Klee goes a step further in his watercolor *The Fruit*, in the possession of Mies van der Rohe (Giedion-Welcker, 1952,

fig. 101) . By imparting “a translucent quality to his colors” (p. 95) he portrays the process of growth, showing simultaneously flower and fruit.



29. PAUL KLEE: “*The Pierced Mother Animal.” Colored drawing, 1923*

SIMULTANEITY

Transparency and simultaneity are closely related in primeval engravings as soon as the concept of time becomes involved in the representation. There are indications that time as we understand it —the chronological sequence of past, present, and future, and the erasing of one by the other —had no meaning for prehistoric man. This partly explains the superimposition of animal outlines, one over the other, without obliterating those which lie below. They all exist simultaneously.

This phenomenon can be observed everywhere in primeval art, from large-scale representations on walls and ceilings to small engraved pebbles, such as those found at La Colombière (Ain).

409

The reason for the continued superimposition is, in all likelihood, that certain places in the rock caverns, or certain stones, were considered to possess greater magical properties than others. It sometimes happens, as in the main hall of Lascaux, that the same animals were overpainted again and again, each later one overlapping, but not obliterating, its predecessor. In one case the outline of a giant bull is overlapped by a later colored horse, but in another the outline of the bull was again repainted over the colored surface of the later animal.

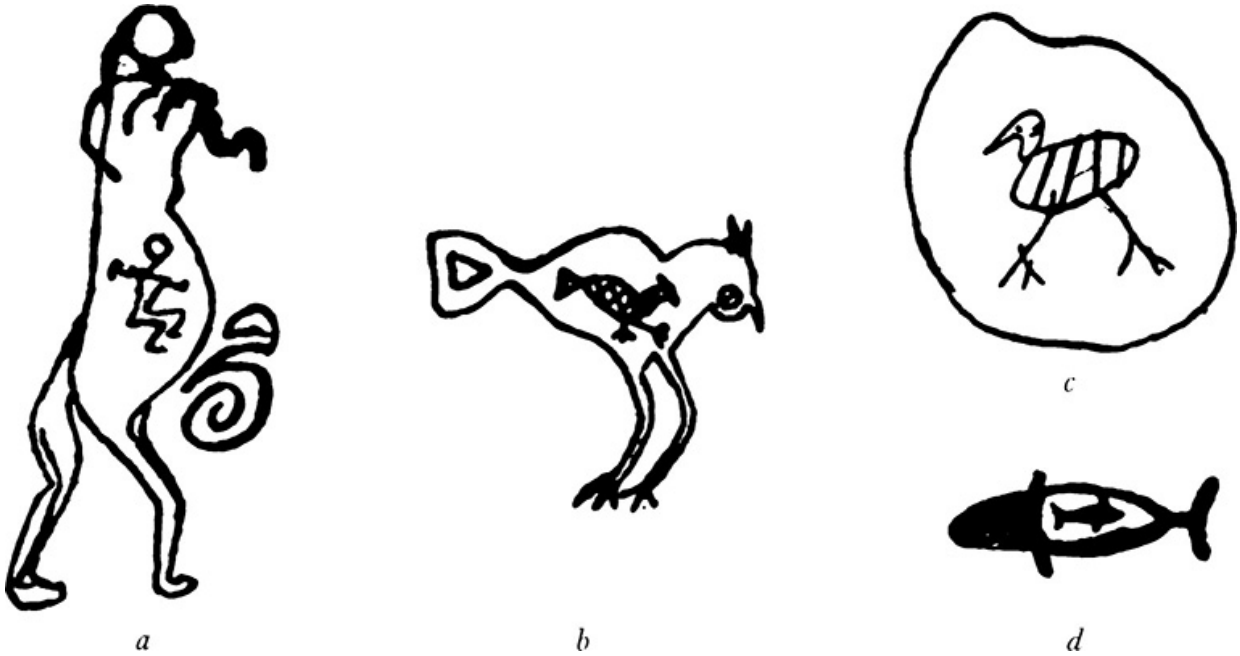
66

That primeval man had the skill to incise his superimpositions so that they immediately catch the eye, even when he was working upon a strongly colored surface, can also be seen in the nave of Lascaux. Here are several superimposed horses, engraved and painted in bister; among these a much smaller horse has been engraved at a later date with an animated Magdalenian outline. One of the hooves of this little horse extends beyond the rim of the larger horse's painted surface. It is therefore not a representation of pregnancy.

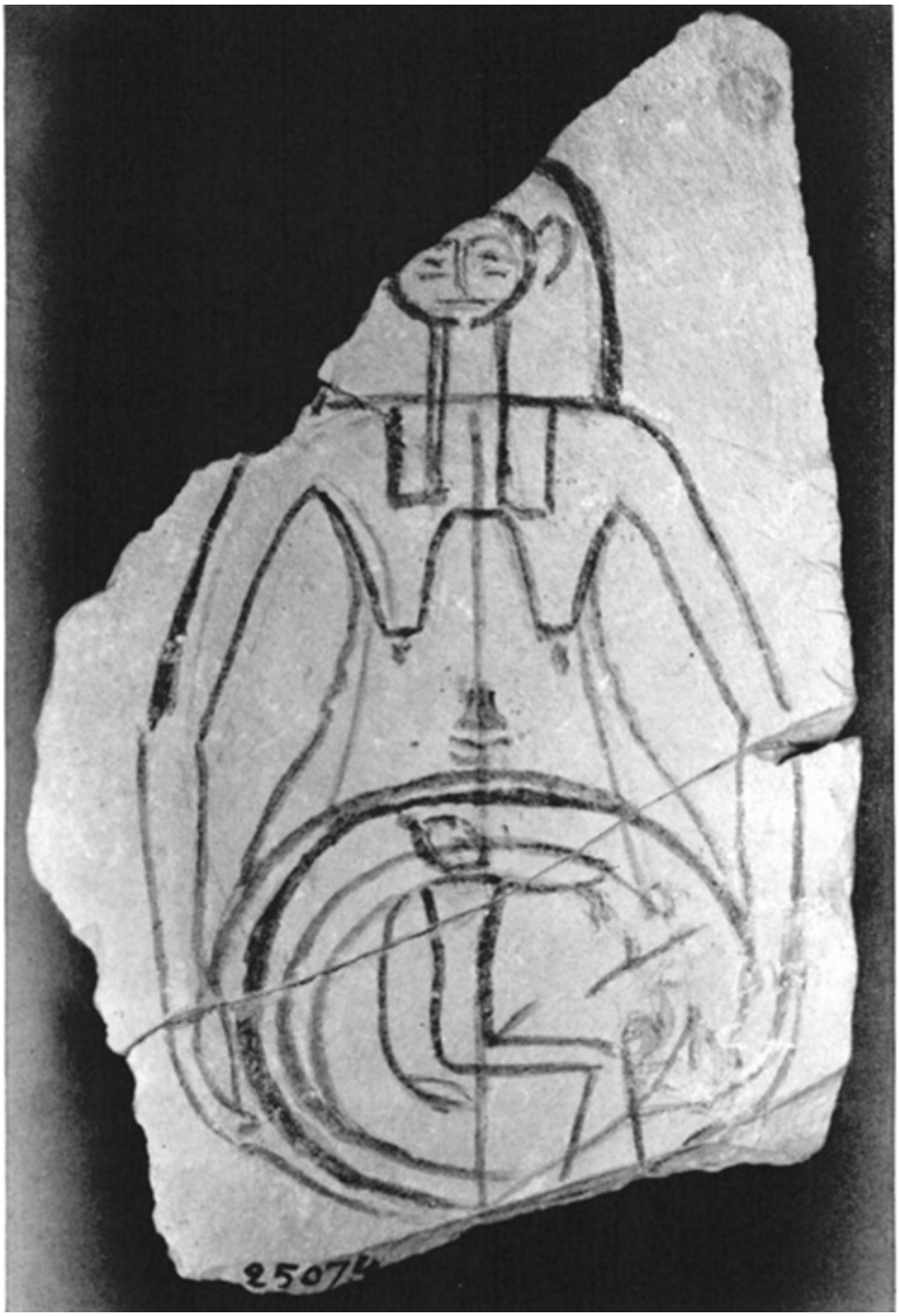
Certain spots emanated a special magic or were invested with a special awe, and here recurrent overpainting of the same configurations became a persistent habit. Representations in the rock shelters of eastern Spain —which extended into the late bronze age —were renewed up to a dozen times.

On the ceiling of Altamira, polychrome Magdalenian paintings partly cover over the faded yellowish Aurignacian animals, but only so far as was absolutely necessary to give the later animals their liberty. Wherever possible, the faded bodies of the earlier animals are left undisturbed. In a famous instance a boar is shown with eight feet, and for some time it was believed that this multiplicity might have indicated movement, but in fact they were the result of overpainting an earlier animal whose four feet show that he still retains his right to existence. Nothing was erased.

30. LASCAUX (*Dordogne*): *Nave. Several superimposed horses painted in bister and engraved. Drawing for fig. 276*

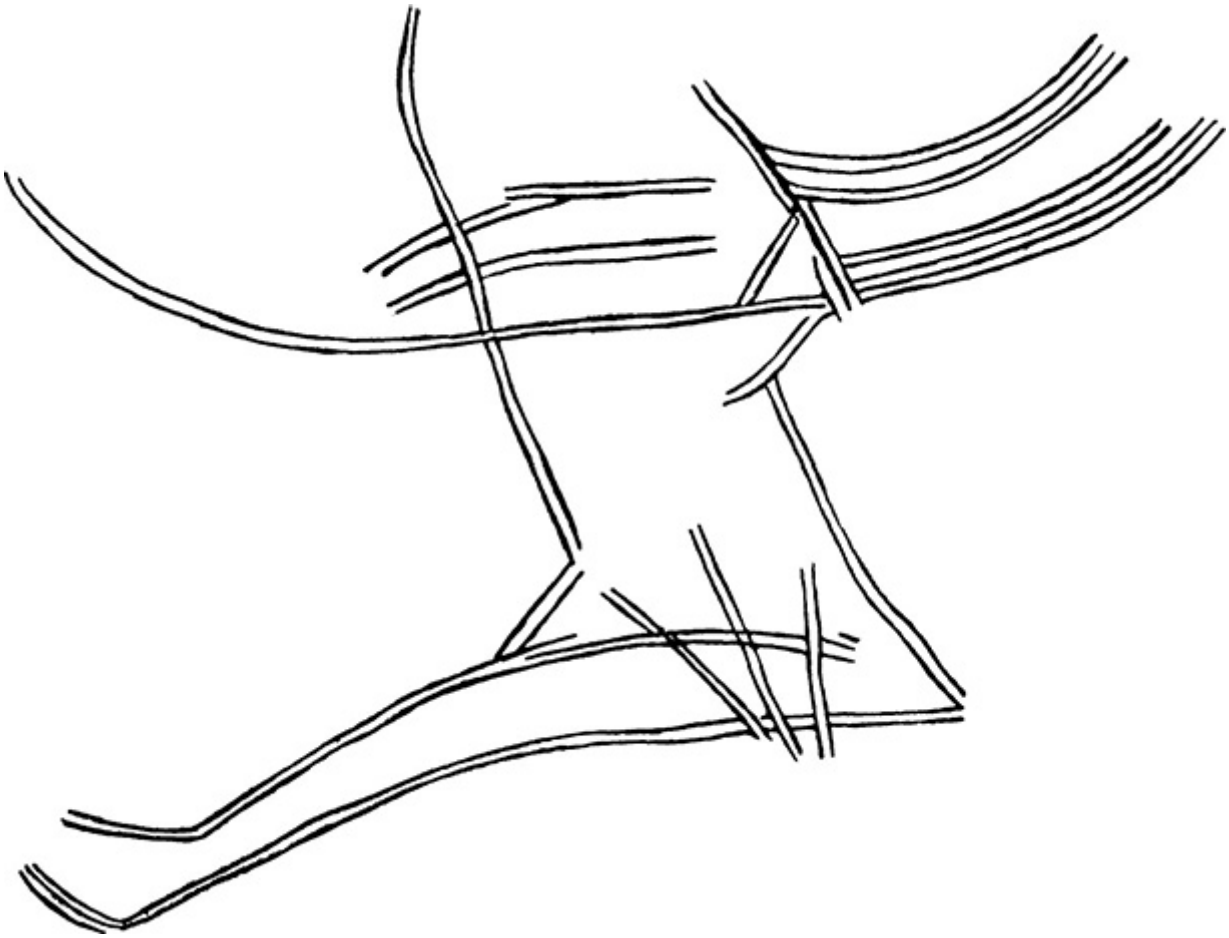


31. Transparency in primitive and child art: a) pregnant woman, by Dakota Indian; b) bird, from Spanish ceramic; c) chicken inside egg, by a child of five; d) whale, by Eskimo. Drawings from Luquet



32. EGYPT, *New Kingdom*: *Ostracon showing mother with child*

33. MARC CHAGALL: *"The Cattle Dealer." 1912*



34. PECH-MEHLE (*Lot*): *Ceiling of the Hall of the Hieroglyphs. Detail of hunter without head. Drawing by Lemozi*

MOVEMENT

The representation of movement was tied in with the nature of paleolithic art from its inception. It was highly developed during the Magdalenian era, especially in the second half of the period, when abstraction became more and more pronounced.

The obvious interest of the paleolithic hunter in portraying the movement of the animals upon whom he depended for his livelihood, and who were so much swifter and stronger than he was, is an easy explanation, but by no means adequate. Behind the exquisite rendering of movement— whether on small pebbles or large rock panels — lies a deep feeling of kinship between man and animal, expressed by paleolithic man's intimate awareness of every aspect of their form and behavior.

26

A few illustrations can instance this. The small Aurignacian bison at Pech-Merle expresses the close relationship of abstraction to outline and movement. Everything that could not evoke the sense of plunging movement has been omitted.

above

From the interlaced figurations on the ceiling of the Hall of the Hieroglyphs in Pech-Merle, the Abbé Lemozi extricated, with meticulous care, a headless man superimposed over a musk ox. He "represents a hunter in a racing attitude: the single leg represented is so strongly projected forward that it makes a right angle with the body" (p. 141) . Just as in the case of the charging bison, all effort has been directed to the expression of his leaping movement: all else is eliminated.

below

It is a tremendous step from this Aurignacian finger drawing in the clay to the latest period of primeval art in the rock shelters of eastern Spain, just before the onset of absolute abstraction. Yet the rendering of human speed is handled very similarly. In the Gasulla gorge in the cavern of Remigia (Castellón), boars are being hunted by several men with large bows held horizontally. The upper part of their bodies is reduced either to a triangle or to a single stroke, and the head is barely indicated. The legs, however, both in girth and length, are exaggerated far beyond normal proportions. They are stretched out horizontally, like a dancer doing the split.

Representation of movement in paleolithic art was highly differentiated. Gossart, a French colonel of cavalry, in his book *Les Allures du cheval* (1907), states his belief that fifty-four equine gaits can be recognized in prehistoric art.

70

Movement can also be rendered almost symbolically by drawing an animal's legs crossed one over the other, as in the cavern of Ebbou (Ardèche). Here a deeply engraved horse, just like several other earlier animals in the same cavern, has its forelegs crossed in such a way that an uninterrupted straight line leads from its neck to

the tip of one foreleg. Primeval man must have considered that crossing only the front legs of an animal was sufficient to indicate it was moving.

35. GASULLA GORGE, REMIGIA (*Castellón*): *Boars hunted by men. Drawing from Porcar et al., 1935*

28

In a more complicated fashion, the same indication of movement is given by two crossed lines on the frontal view of a Magdalenian reindeer from Gourdan (Haute-Garonne).

right

An exceptionally elegant perforated staff (*bâton de commandement*) was dug up recently by B. Bétirac in the Abri Montastruc near Bruniquel (Tarn-et-Garonne). It is from the middle Magdalenian period and depicts a horse jumping. The animal springs upward with retracted forelegs, the hind legs still implicit in the long slender shaft. The whole composition follows the curve of the reindeer antler from which it is carved. Everything serves to heighten the impetus of the movement to an extraordinary degree.

74

At the extreme end of the Magdalenian period, after the outline had become completely mastered, it was possible to engrave upon small pebbles lines so fine that

they cannot be rendered sufficiently distinct by photography. One of these pebbles from the Abri Murat (Lot), found and copied by the Abbé Lemozi, is reproduced here in its natural size. As recounted by him, one side depicts a scene of magical ritual before the hunt. On the other is an ibex in full flight. The only features which identify this animal are, as so often, a horn and an ear. Little more remains of the head. The body is stretched out to its utmost. One lightly curved stroke for the forelegs and two lines for the hind legs catch the animal in mid air.

36. EBBOU (*Ardèche*): *Aurignacian horse with forelegs crossed*

37. ABRI MONTASTRUC (*Tarn-et-Garonne*): *Perforated staff with jumping horse*

38. LA MADELEINE (*Dordogne*): *Horn carving of bison with back-turned head, Magdalenian IV.* L. *10.2 cm.*

Part of the masterly skill of Magdalenian man lay in his ability to incorporate every kind of movement into a work of art —particularly during the middle Magdalenian period.

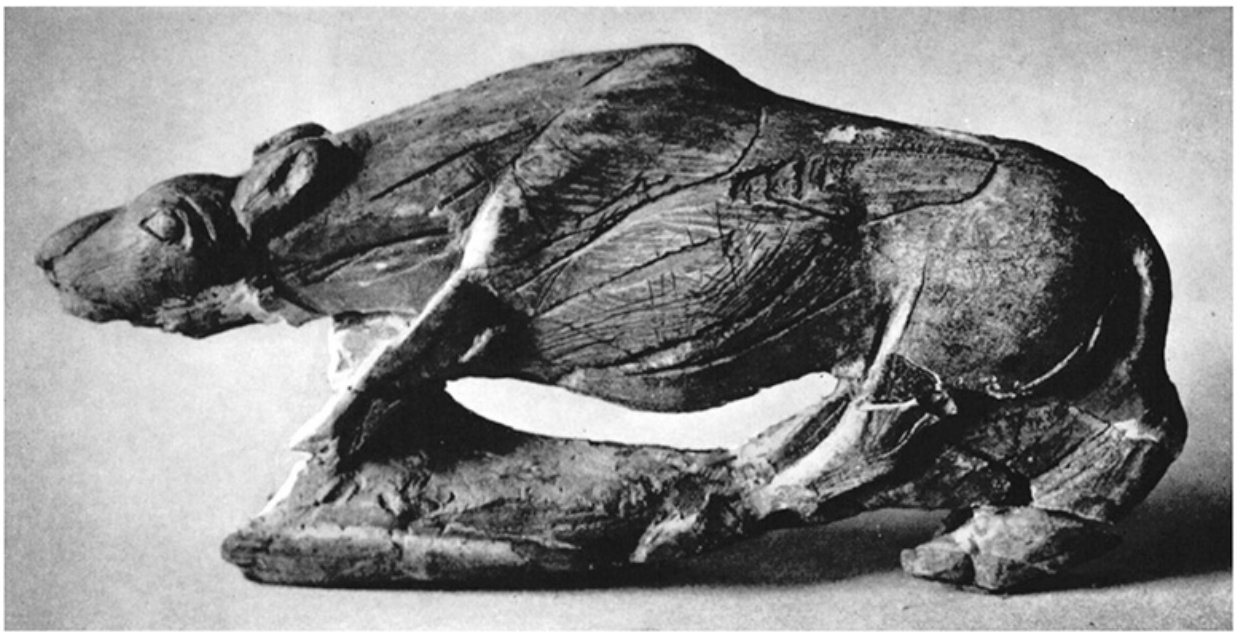
right

Movement was not always depicted as a leap in mid air: for example, it could be the instant when an animal gathers himself together just before springing forward. This can be seen in the bone carving of a beast of prey from the rock shelter of La Madeleine, now in the museum at St-Germain-en-Laye. Peyrony found it "in very bad condition, the material peeling apart" (Capitan and Peyrony, 1928, pp. 50–51) . Whether this animal represents a hyena or a feline is unclear. What is interesting is the ability to portray crouching tenseness before a leap. The whole body quivers: the head is stretched flat out, the curved back strained to its utmost, and the tension of the diagonally stretched forelegs prolongs the line of the back. All this lends greater emphasis to a slitlike perforation between the line of the animal's belly and the ground.

left

The rock shelter of La Madeleine also housed a well-known small bison carved from reindeer horn. Particular care was expended on this object, the interest being especially centered on his back-turned head, which is, doubtless intentionally, oversize: "The way in which this head is handled is astonishing; everything is there: the bulging forehead

decked with coarse hairs, the dark muzzle covered with soft fur, one horn in relief the other sunken, small ear, large and well-studied eye, the rim around nostrils and mouth separated from the rough coat by a line of punctuations; dewlap and mane are represented by long strokes; the tongue protrudes from his mouth and is sunk into the back" (pp. 49–50). It is the forceful movement of this animal licking its back which was here portrayed with full plastic vigor and in defiance of every naturalistic relation of body and head. This backward-turning head was in no way a tour de force arrived at because of shortage of material, as was originally thought (p. 49). This backward-turning type of head can frequently be found in Magdalenian art, even when ample space, or material, was at hand.



39. LA MADELEINE: *Bone carving of hyena or feline, crouching before leap, Magdalenian IV. L. 10.8 cm.*

Movement today

Today the urge to explore movement— that is, change in all its forms — determines the channels followed by scientific thought and experiment and, ultimately, our emotional expression in the arts.

Movement is one of the fundamental issues of Western civilization. In *Mechanization Takes Command* (1948, pp. 14–30), we have traced in some detail the development of the scientific representation of movement. This first appeared in the fourteenth century, but grew with dramatic speed during the first half of the nineteenth century, when movement was first registered by mechanical devices. The second half of the century achieved the visualization of movement in space by the use of photography, which recorded phases of movement inaccessible to the human eye. We may cite A. J. Marey, who as early as 1885 photographed the trajectory of a crow's wing.

right

In the early years of this century, painters and sculptors were working parallel with, but independently of, industrial research workers on the simultaneous representation of the successive phases of movement: Giacomo Balla's *Dog on a Leash* (1912), Umberto Boccioni's *Marching Man* (1913), and other works of Italian futurism. Perhaps the boldest handling of the different phases of a single movement was Marcel Duchamp's *Nude Descending Staircase* (1912). Paul Klee in his *Scene mit der Laufenden* (Scene with Running Woman; 1925) developed this still further by depicting space flowing past the moving figure.

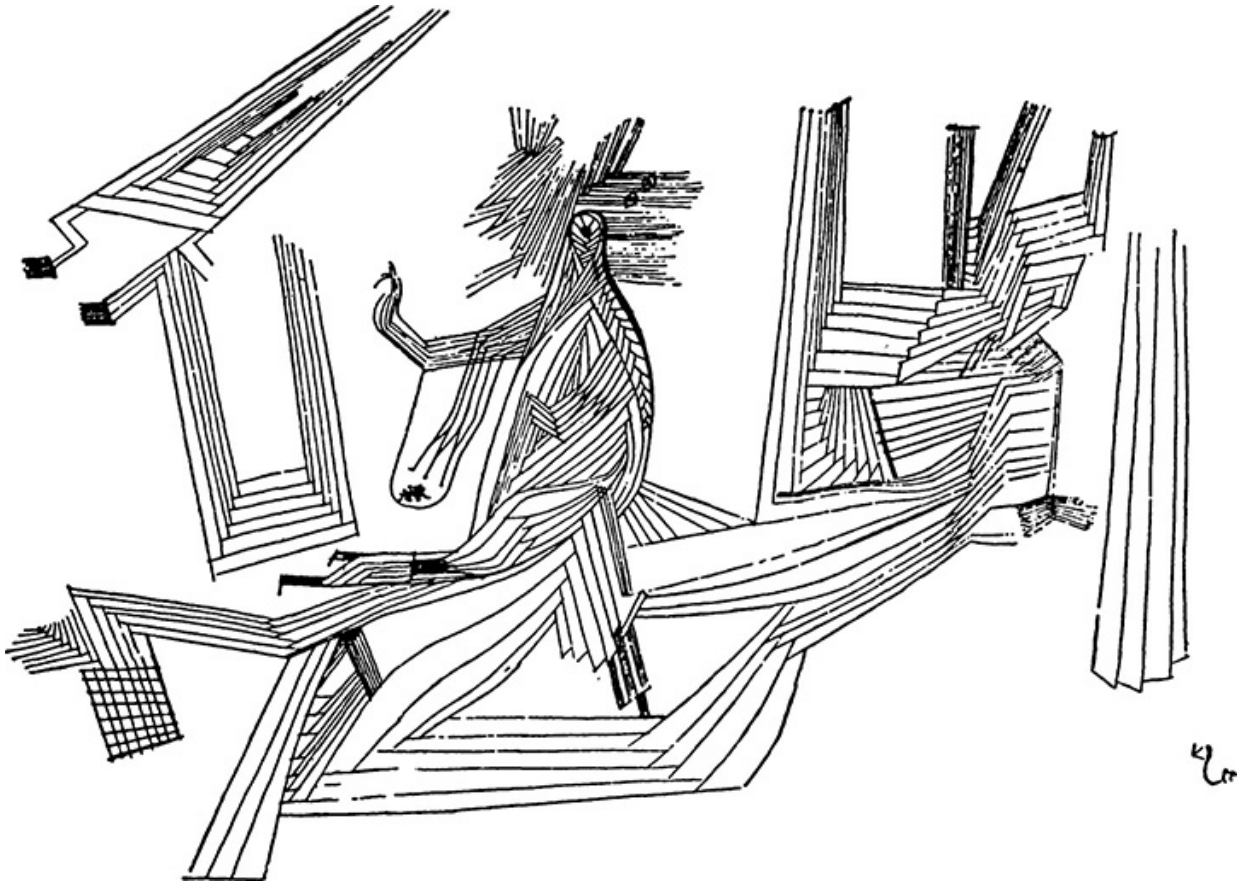
The next step was the representation of the path of movement itself, without the intervention of the causative body. This arouses an immediate emotional response in the paintings of Klee, Kandinsky, or Miró, among others, and it is astonishing how fraternally close their representations of absolute movement come to the scientific trackings of lines of movement through space by some of the pioneers of scientific management (Giedion, 1948, pp. 100–113).

40. ABRI MURAT (*Lot*): *Pebble engraved with ibex in fight and, on reverse, ritual scene. Drawing by Lemozi*

This brief summary has been included to avoid any impression that a direct parallel could be drawn between representations of movement in primeval art and our contemporary interest in movement, as could be done in the use of transparency.

In prehistory the dominant role was occupied by the animal, and this governed all representations of movement. But contemporary art — with respect to its representation of movement — is fed from two very different sources. The first, as has been noted in

the use of transparency and simultaneity, is the reawakening of long-buried instincts and, parallel with it, the revival of certain primeval means of expression. The other is the use of new means of expression derived directly from the heart of contemporary thought. These two sources are in no way contradictory: they interrelate constancy and change.



41. PAUL KLEE: *"Die Scene mit der Laufenden." Drawing, 1925*

PART III
SYMBOLIZATION

THE SYMBOL IN PRIMEVAL ART

17, 137

Before art, man created the symbol. The name arose late, the symbol early: it appears at the very dawn of man's urge for expression. In its first rudimentary form, it emerged in the Mousterian era as the trace of Neanderthal man's first attempts at a spiritual organization transcending simple materials and a utilitarian existence. Bones engraved with parallel and diagonal lines or with red circles have been found, but these are so fragmentary that no safe conclusions can be drawn from them. It is quite otherwise, however, with the small, hemispherical hollows carved out of stone: cupules, we call them. Prehistorians report that the earliest surviving man-made symbols were discovered on a triangular grave slab in the rock shelter of La Ferrassie, in the Dordogne.

These were small hollows in the slab, which was placed face down over a child's body. These cupules, which had no practical function, are a widespread phenomenon of paleolithic art; their symbolic significance is not exactly defined.

The magic symbols that appear most frequently and over the longest periods of prehistory are simple ones. They consist of fragments, the part standing for the whole: a hand, for example, represents the entire human being, the genitalia represent fertility. But it is more difficult to give meaning to the circle. It appears in a great number of forms, large and small —as cup-shaped depressions in stone (*cupules*), colored dots and disks (*ponctuations*), and holes (*perforations*), often varying in shape.

In primitive times symbols sometimes stood alone, though usually several were associated and interrelated: e.g., dots were related to hands, to animals, or to tectiforms, and cupules were arranged in rows or placed singly in association with an animal or upon the animal. Greater precision could thus be given to certain of the manifold meanings inherent in any one symbol, and also a single overriding meaning could be accentuated, such as the desire for increased fertility. Such designs, in which different symbols with various meanings were combined in order to stress one specific meaning, may be called "composite symbols."

424, 267 col

In addition to simple straightforward symbols, numerous complex and entirely abstract forms were developed in primitive times. Man's inventiveness in this direction seems to have been inexhaustible, but the meanings are all the more obscure. The names given these more complex symbolic forms are mere labels — tectiforms, as well as

claviforms and naviforms. In contrast to the simpler symbols, individual imagination here seems to have been given free play, and in many cases only a single example of certain types is as yet known. These symbols are usually in the most inaccessible parts of the caverns, as at Altamira, El Castillo, and La Pasiega. The fact of their inaccessibility may be interpreted as referring to the special potency of the magic emanating from them. Even today many of these configurations exert a strangely powerful impression on the beholder, as in Altamira, where blood-red zigzag symbols as large as the adjacent drawings of bulls traverse the whole ceiling.

Symbolization arose from the need to give perceptible form to the imperceptible. Symbolization emerged as soon as man had to express the disquieting and intangible relation between life and death, first expressed in very primitive ways. When J. J. Bachofen said that it was in the tomb that the symbol was formed, he was thinking of the Etruscan necropolis that was the starting point for his pioneer researches on symbolism (1859). His supporting material was provided by tomb reliefs, long ignored by archaeologists, and by his profound knowledge of classical literature. Since then, both material evidence and our understanding of symbolism have increased enormously, and our newly acquired knowledge of primitive art has largely sustained Bachofen's theories.

APPROACHING AN AGE OF SYMBOLISM

There are signs today that we are again approaching an age of symbolism, and that a prolonged phase of "realism" is giving way to new conceptions of reality, a reality of multiple dimensions and renewed significances. The present revival of interest in the symbol and its meaning leads us back to its origins in prehistory. It is there that the whole process of symbolization can best be studied. Indeed, symbolization is the key to all paleolithic art, from the grandiose engravings and paintings in the caverns of southern France and Spain to the small artifacts made from reindeer antlers. In every instance, actuality has been translated into symbolism, however realistic it may appear. This transmutation persisted throughout paleolithic art until the neolithic period, when abstraction reigned supreme.

It is only in recent years that scholarship has recognized the importance of a systematic study of the symbolic content of prehistoric art. The further we proceed in such investigations, the more we are astonished at the amazing richness of imagination displayed. Here, it seems, may be the source of much of the imagery which has been attributed to Greek art. The previous work of all serious prehistorians and anthropologists, however, has concentrated on the classification of material objects such as hand axes and other such tools. Consequently, there still exist great gaps in our understanding of what symbols meant to prehistoric man.

Today the common denominator in creed and ritual that once linked man to man has lost its force. Whereas in primitive eras magic, myth, and religion provided man with a spiritual armor against a hostile environment, today he stands stripped and naked. In the effort to compensate he has had to create symbols and inner images out of himself. Half ironically, the surrealist painter Max Ernst wrote, "in 1930, after having composed with violence and method the *Femme 100 têtes*, I was visited nearly every day by my private phantom attached to my person —the superior of birds named Loplop" (1948, p. 9).

Today the average man appears to have lost the key to his own being, even though he still believes that he knows what he likes and can express what he feels. The ruling taste of the times demonstrates the result of this loss, for it affects the entire sphere of emotional activity. The average man, whether governed or governing, has grown indifferent to the flood of surrogates, to *ersatz* in art and architecture, to falsity in expression —I have called this process "the devaluation of symbols" (1948, pp. 329–63). For a century and a half it has been apparent, and it is still going on. The decline in our community life, our helplessness in finding forms for celebration or leisure, our lack of imaginative power to develop forms to counteract the maladies of our culture, all indicate the extent of man's present disorientation.

It is not difficult to understand how this has come about. The man of today has to bear an enormous and increasing load of intellectual knowledge, while at the same time his emotional world has been steadily atrophying. His emotional apparatus has shrunk to a mere appendage, quite unable to absorb and humanize the knowledge accumulated by his brain. He stands alone. It may be that from new developments in the communal sphere some new suprapersonal spirit will emerge. But at the moment, man must rely on himself. This situation may give us a clue to the nature of those symbols which are today emerging in the work of contemporary painters and poets.

THE REAWAKENING OF SYMBOLS

Jean-Paul Sartre is a poet with visions of what kinds of symbols are possible today. In *L'Imaginaire* (1940) he asserts that, in contrast to the situation in former periods, symbolic function is no longer derived and explained from the outside world. "We would not accept a conception according to which the symbolic function has to be added to the image from outside. The image is in essence symbolic by its very structure" (p. 128). Without any kind of intermediary, the symbol through its very form finds a direct access to the emotions.

Forms that have no apparent significance and yet seize directly upon the senses are the dominant constituent elements of "contemporary art." These symbols differ not only from the magical potent symbols of prehistory but also from the conceptualized symbols of the Greeks. Today's symbols are anonymous: they seem to exist for themselves alone, with no direct significance. Yet they are imbued with an inexplicable attraction: the

magic of their forms. In a sense, they represent a regenerative or healing process, a flight from technological frenzy. Besides these anonymous symbols or forms without direct significance, age-old symbols from the remote past have been revived and integrated into new contexts, as is discerned in the work of Miró and Klee, among others. It would be a rewarding though difficult task to carry out some form of research which could give us an insight into the process of this development and its manifold ramifications.

It cannot be said today that the forces of symbolization no longer exist. A great picture that seizes all our senses simultaneously (such as *Guernica*) can become a great composite symbol. As we become aware of the multilayered fabric of the soul, we try to ascertain not only the limits within which logical argument operates as a reliable tool but also the areas in which that tool cannot be used, areas of different psychic dimensions. The laws of logic have colored philosophic thought ever since the Renaissance, especially since the seventeenth century. This influence is closely paralleled in the optical sphere by the influence of perspective on our view of the world. It is just these narrow criteria of logical cause and effect and of optical perspective that the present period resents and rebels against.

One no longer has to ask why. Our eyes are not blinded to the marvelous artistic achievements of recent centuries; but we have become ever more conscious of the situation to which rationalism led us throughout the nineteenth century: that of living only for the moment, lacking all certainty regarding decisions that take on psychic dimensions. The one-way street of logic has landed us in the slum of materialism.

THE SYMBOL AS A CONCEPT

It was the Greek way of thought that gave rise to the conceptual form of the symbol. The word “symbol” (itself of Greek origin) was absorbed into the most diverse languages, including Latin, although the Romans had no love for the concept it represented. The variety of meanings the concept had for the Greeks of the classical period is apparent from the fact that they formed three different nouns from the original verb. Its complicated linguistic relations were set down as early as 1810–12 by Friedrich Creuzer. The original Greek verb *symballein* signified the act of adjusting various parts to form a whole, and its variant meanings were “to unite,” “to connect,” “to bring separate parts together.” The simplest notion of *symbolon,* therefore, is that used by Plato, “one composed of two.” The best known example of the Greek use of the symbol is a host’s gift of part of a broken coin or ring to a departing guest, so that when these halves were later matched, the owners or their descendants could recognize one another.

The symbol became a token of relationship which had been given a special significance. Viewed objectively, no connection exists between the fragment of the

broken coin and the meaning it had been given, nor is any clue perceptible to the senses —it eludes them. The symbol resumed its suprapersonal significance and recovered its original role as the image of something that cannot be directly expressed.

In a passage of his *Versuch über die Gräbersymbolik der Alten* (Essay on Ancient Mortuary Symbolism; 1859), Bachofen gives simplified expression to the role of the symbol: "Words make the infinite finite, symbols carry the spirit beyond the finite world of becoming into the realm of infinite being" (1954 edn., p. 52). Thus the symbol recovers its primitive significance: it is nameless, yet a powerful reality, and it is this consistent meaning that is again operative today. And thus the early insights of such men as Creuzer and Bachofen, rejected in their own day, are now being confirmed.

THE BEGINNINGS OF THE SYMBOLIC APPROACH

When considering the continuity of human experience we have to go back to the primary issue: what is fundamentally different between the apperception of man and of animal in coping with the outer world? Are the tools (if I may call them that) which are at the disposal of man and of animal different or not?

To give the answer immediately: that which distinguishes the man from the animal is his symbolic approach.

In his last book, *An Essay on Man* (1944), in which the philosopher Ernst Cassirer gave much of the essence of his earlier works, he turned to the biologists for help in elucidating what distinguishes man from animal. J. J. von Uexküll, the German biologist, developed, in the first decades of this century, a new approach to the animal world. This was about when the Cubists were developing a new space conception by eliminating the single point of view of the Renaissance. The biologist declared that only a very naïve sort of dogmatism could assume that an identical reality exists for all creatures. Reality is not a unique and homogeneous thing. It is immensely diversified, and has as many different patterns as there are organisms. The world of the housefly and the world of the dog are essentially different. There is a world of the housefly and there is a world of the dog. Each creature lives in a universe of its own, based upon its own experience.

Each species possesses a receptor system, varying with its own anatomical structure, which receives stimuli from the outer world. Each also possesses an effector system by which it reacts to these stimuli, in order to maintain an equilibrium between its inner and outer worlds. The working unit established by these two systems was called by Uexküll the *Funktionskreis*: the circle of function.

Human life has to obey the same rules that govern other organisms.

Each animal is perfectly adapted to its environment and is able to restore the equilibrium between inner and outer world according to its own nature. How does man

restore this equilibrium? Is there something in his apperception of the world which distinguishes him from the animal? If so, what is the clue to it?

To summarize Cassirer's answer to this question: the distinctive mark of human life is that man lives in a new dimension of reality. What does this mean?

To establish his adaptation to the environment and to maintain or restore equilibrium between his inner and outer worlds, man's effector system can use a quality that is not to be found among the animals. This is the symbolic approach to the world.

Out of this new —or, perhaps one may say, specifically human —dimension of reality have grown art, language, myth, and science. The distinction between the man and the animal is simply that man lives not only in a physical universe but also in a symbolic one.

Ernst Cassirer's notion that the distinctive mark of human life is its symbolic approach won early recognition. Leslie White (1940) declared: "Today we are beginning to realize and to appreciate the fact that the symbol is the basic unit of all human behaviour and civilization. . . . All human behaviour originates in the use of symbols. It was the symbol which transformed our anthropoid ancestors into men and made them human. All civilizations have been generated and perpetuated only by the use of symbols. It is the symbol which transforms an infant of *Homo sapiens* into a human being. . . . All human behaviour consists of, or is dependent upon, the use of symbols. Human behaviour is a symbolic behaviour; symbolic behaviour is human behaviour. The symbol is the universe of humanity" (p. 229).

It is this line of demarcation between man and animal that psychologists in many countries have tried to determine. Americans, Germans, and Frenchmen have conducted experiments on the mentality of apes, sign behavior in chimpanzees, etc. The work of psychologists, linguists, and semanticists has also tended to converge toward the same point: the elucidation of the fundamental differences between the conceptual capacities of man and animal.

The French linguist Henri Delacroix, in *Le Langage et la pensée* (1924), states that a parrot is capable of repeating words and sentences and possesses a perfect vocal apparatus, a fine ear, and an excellent memory. Therefore, it is not the physical equipment to learn a language that is lacking in the parrot.

But when the parrot repeats a whole sentence, it is for him an indivisible entity —a series of single words inextricably knitted together. The parrot is incapable of changing the position of any single word. He simply repeats *les phrases-mots:* word-sentences. To the animal, either words or sentences are mere signs. They are never born out of a symbolic imagination, as they are with man.

Both man and animal are capable of expressing joy, grief, and anxiety by sounds and gestures, but the insurmountable difference between man and the animal world —the reason why animals can never pass the prelinguistic stage — lies in their lack of symbolic imagination. To the animal, words are sounds, always connected with specific

objects. Never can words become symbolic abstractions, as they do in the human world when they are integrated into a new artifact called *sentence.*

From his earliest beginnings, man has made use of symbolism in his approach to every aspect of the world. There are as many spheres of symbolism as there are human activities.

Magic symbolism was developed in the paleolithic period, in the stone age, when man perforce lived in the most intimate contact with nature; when he felt himself surrounded by visible and invisible forces which seemed to menace him; when he could not distinguish between subjective and objective conditions; when the picture of a being, whether animal or human, emanated such magic forces that image and reality were fused into one another.

This was the period of the hunter.

SYMBOLS AND ARCHAEOLOGY

Today we are no longer satisfied with mere facts and philological exactitudes. There is a demand for the results of scholarly investigations into symbols. Impetus to this demand was given by the classical philologist, Ulrich von Wilamowitz-Moellendorf, in his lecture "Die Griechische Heldensage" (The Greek Heroic Myths), delivered in Berlin in 1925 (pp. 41– 62). But we are confronted by nothingness, by *lacunae,* or by the work of dilettanti whose knowledge of the source materials cannot be trusted. The desire to interpret myths and symbols had for too long been declared incompatible with the honor of a scholar. His ethos has been founded upon an "unshaken love of truth and a disinterested devotion to all the problems of antiquity" (Howald, 1926, p. 23). This acted as a shield, covering and suppressing all investigation of symbols for more than a century. The scholarship of the last hundred years was compelled, by its very conception, to condemn all attempts in this direction and to cast out all adherents.

Since the end of the eighteenth century, there has been no continuity of investigation into symbols. Sometimes a spring wells up. Always it sinks back. This is thoroughly understandable, as archaeological methods have modeled themselves, ever more closely, upon the methods of the dominating natural sciences. This has meant that absolute certainty became the goal of archaeology. Unfortunately, despite all desire for precision, the use of purely rational methods is not possible in the sphere of prehistory and protohistory. Often the very essence of phenomena and symbols lies in their manifold meaning.

Today, when the question of the inner meaning of phenomena has slowly come to the fore and history is identified much more with human destiny than treated as a sequence of events, we lack the necessary source material: a background of scholarly investigation into the meaning of symbols. Thus, despite the present high development of

philological studies, those studies which depend upon the derivations and meanings of language and mythology are bound to be fragmentary.

At the end of the seventeenth century there arose the towering figure of Giambattista Vico (1668–1744). This Neapolitan philosopher was the first great scholar to take a stand against the rationalistic method of Descartes and to confront this with the notion of thought springing from fantasy. In his *De antiquissima Italorum sapientia* (1710) he investigated languages and myths to reveal their hidden meanings. He experienced bitterly what it meant to oppose the supremacy of rationalism in the Age of Reason.

The beginnings of today's investigation of symbols go back to Christian Gottlob Heyne (1729–1812), a philologist in the University of G öttingen, who wanted to consider all spiritual values in the context of their general culture (Howald, 1926, p. 6). Heyne did not delve deep into the sources as Vico did. Though oriented toward the symbol, his methods are those of the Age of Reason.

It was a romantic who gave the early impetus to present-day research. The birthplace was Heidelberg. There, just after 1800, a highly select circle had come into existence: the poets Novalis, Arnim, Brentano, Schlegel, and Tieck; the philosopher Schelling; the influential jurist Savigny; and Görres, historian of the Roman Catholic Church. To this circle belonged Friedrich Creuzer (1771– 1858), and this was the atmosphere in which his great work *Symbolik und Mythologie der alten Völker*, *besonders der Griechen* (Symbols and Myths of the Ancients, especially the Greeks) came into being (1810–12).

He represents the speculative period of investigation into the origin of myths. He was under fire from the philologists all his life, the consequence of a number of inconsistencies —large and small —which were used to ridicule all further investigations into symbols. He dreamed in vain of a university chair for the serious study of symbols. Heyne had based his research upon the idea of enlightenment; Creuzer's starting point was romanticism. Like Vico, he considered language to be the most faithful record of earlier periods. Symbolism aided him here. It was the means of expressing everything. He developed the Greek notions of the symbol and saw that it "in einem Blick das Ganze erfasst" (encompasses the whole in a single glance). From this he derived a new conception of the symbol which he called "momentane Anschaulichkeit" : immediate perception (Creuzer, I, par. 20).

In demarcating myth from symbol Creuzer arrived at what he called the symbol at its summit. He comes very near to Bachofen when he remarks: "In other words, the symbol wants to say much and should express the divine (but what it has to say it must say decisively, without circumlocution and confusion). . . . In a flash the notion springs out from the symbol and grips all the senses. It is a ray which comes directly from the depths of being and thinking, pierces our eye, and permeates our entire nature: immediate perception" (pars. 34, 35).

It was easy to attack the faulty conclusions and "fantasies" in Creuzer's arguments from the standpoint of philological exactitude. But what lay behind these scholastic objections was actually a materialistic approach to history.

The German scholars of the time were not merely antagonistic toward inaccuracies or open mistakes. They shrugged aside any methodical work in these fields. Their attitude was shared by the French. When Creuzer was translated into French, Ernest Renan — who had done his part to strangle mystical thought — said: "He searches for abstract thought and profound ideas amid trivialities."

In profoundly thoughtful and lonely isolation, Johann Jakob Bachofen (1815– 87) surpasses all others who attempted serious work on the investigation of symbols during the last century. Bachofen: a man both outwardly and inwardly independent, living in his own world, a resident of the same city as Jacob Burckhardt. They avoided one another. Burckhardt (1818–97), with all his breadth of vision, was still in the mainstream of nineteenth-century thought; Bachofen's work was a testament which achieved recognition and influence only half a century after his death. There was no place then for the "discoverer of primeval religion" and of the maternal aspects of matter (Bernoulli, 1924, p. 57). In his own time, it was considered that he was following up false scents and, when not actually attacked, he was totally ignored.

Bachofen was recognized neither in his own country nor in Germany. But in England the scene was somewhat different, in so far as a certain interest in the structure of the nonclassical primeval world was already alive. A Scottish lawyer, J. F. McLennan, one of the first to deepen the theories of totemism, had independently discovered the importance of matrilineal descent. McLennan obtained a copy of Bachofen's *Das Mutterrecht* (Mother Rule; 1861) —by no means easy reading —and immediately recognized Bachofen's stature, giving full credit to the mystical Basel patrician. "It was in the spring of 1866," he wrote, "that I first heard of *Das Mutterrecht*, and then I found that I had been anticipated by Herr Bachofen in this discovery. No two routes, however, could be more widely apart than those by which Bachofen and I had arrived at this conclusion. I was led to it by reasoning on the exigencies of my explanation of the origin of the form of capture. To Bachofen the fact seems to have revealed itself as everywhere underlying the traditions, and especially the mythologies, of antiquity which his prodigious learning comprehended in all their vast details" (McLennan, 1876).

It is the depth psychologists, rather than the prehistorians or archaeologists, who — since Freud and Jung —have been searching for the meanings of myths and symbols. Their starting point has been the individual psyche, in particular the individual psyche of the clinical neurotic of our own day.

Freud's *Totem and Taboo* (1912) stimulated new lines of research among anthropologists, and the work of Jung, Rank, and others gave rise to a long series of investigations into the "individual" in the form of the "hero," a figure which came into being with the dawn of history.

But an approach which has its starting point in the individual is not without its dangers. It has been stated that this approach "from the soul and from the subjective never emerges from a self-made prison, and never finds the entrance to relations with the objective world" —so the Swiss writer Julius Schwabe, in his interesting work

Archetyp und Tierkreis (Archetype and Zodiac; 1951, p. xxxv). Schwabe expresses this point of view in developing a thesis that the myths and symbols of the first high civilizations are related to cosmic phenomena rather than human emotions and that archetypes are not products exclusively of the unconscious mind. In this Schwabe is following Bachofen: "Earthly events are knotted to the cosmic. They are its telluric expression. It was the universal, fundamental belief of the ancient world that earthly and heavenly phenomena obeyed the same laws and that a great harmony permeated perishable and imperishable alike" (Bachofen, 1861; 1948 edn., II, p. 131).

On the other hand, archaeologists, ethnologists, and those who pursue the historical disciplines are more concerned, in their researches into symbolism, to limit the so-called unconscious strata and to trace back certain phenomena regarded as "inexplicable" to the moment in time when they were created in full consciousness by the human spirit.

Even in the time of the archaic high civilizations man was not yet enclosed within his own ego. He was still convinced of cosmic and telluric interconnection between stars and men. This conviction of interdependence and of its consequent influence upon human destiny was an outcome of that inseparable oneness of the world which pervades the whole of prehistory, from its language of symbols to its perception of space.

SYMBOL AND EXISTENCE

Let us repeat: the symbols of primitive art are rooted in the primary demands of human existence, in the idea of the continuity of life and death. The main purpose of primitive existence was to obtain food. Food meant the animal. Where direct attack on the animal was not successful, rituals, magic signs, and magic symbols were devised, by which man hoped to be invested with power to bewitch the animal. But the mere killing of beasts was not enough to ensure a continuous food supply; that depended also on the fecundity of the stock —to ensure this, primitive man was even more ineffectual. Only magic held out hope.

We can therefore understand that most early symbols, though they appear in highly varied, even opposing, combinations, were concerned with the perpetuation of the animal species, and in one way or another were designed to promote fertility through magic. We see this more clearly in the primitive Aurignacian than in the later and more highly developed Magdalenian era. In the former, one symbol of fertility is the vulva; it appears constantly, generally alone, but sometimes in combination with the animal whose increase is desired. Such representations of female organs have certainly nothing to do with human sexual instincts, nor do the much rarer representations of male organs or the small female figurines with enormous breasts and bellies, or the ithyphallic male figures.

Signs of a belief in the continuance of life after death appeared in the early Mousterian age. Things come to no abrupt end, death does not completely extinguish life, while some possibility of re-entering the earthly cycle emerges, both for men and for animals —though how this was to be achieved is unclear. In that age man lived close to his dead, who were buried within his dwelling place. Tens of thousands of years later the same custom was practiced in the Nile delta (Merimdeh), just before the dawn of history. The dead influenced the fate of their descendants, they shared in the family meals. Today in parts of Polynesia it is customary to bury the dead within the dwelling or outside beneath the eaves. This burial area is sacrosanct. People do not turn their backs on it, and when they lie down to sleep they orient their heads in that direction.

The animal, too, possessed magic power after death. Both in the interests of the food supply and to placate the spirit of the dead animal, it was reasonable to take steps to facilitate its return to life. In short, everything was done as though the animal had magic powers at its command which must be propitiated or dominated by other magic forces.

SYMBOL AND MYTH

Premythological man was completely embedded in the world around him. He formed one with it, he did not stand above it, he did not feel himself to be the center, but a humble element in it. His fate was ruled by powers he could not comprehend. To him the animal was a superior being, a creature greater than he, and at the same time a personification of invisible powers. All primitive symbols are rooted in this zoomorphic age. However simple or complex, these symbols all represent invisible forces in a universe not yet reduced to a battleground between man and man.

Myths, on the other hand, are based on the relationships and destinies of men or of men and gods. In myths, time (the succession of events) plays a determining part. To primeval man today, yesterday, tomorrow —all were one. Myths grew out of the huge transformation from the zoomorphic to the anthropomorphic age in which we still live, and thus they arose relatively late. It would be hazardous to assign to them precise dates; yet, from their content, the conflicts they embody, and the context in which they are described, we may assume that they roughly coincided with the first formal communities, such as the small temple settlements that flourished in northern and southern Mesopotamia in the fourth millennium B.C.

In the Sumerian epic of Gilgamesh, the cities had already become the acknowledged centers of religion and authority, and Gilgamesh the epic hero ruled the city of Uruk. According to the evidence, Gilgamesh did not live before 2700 or 2600 B.C. Therefore, the epic recording his heroic deeds can be no earlier than about 2600 B.C. In this period a new world of gods, whose hierarchical structure precisely reflected the contemporary social order, came into being.

If we consider the situation immediately before this, as reflected in Persian and Mesopotamian pottery of the fourth millennium B.C., we find no trace of myth and the world of the gods, such as appear on the cylinder seals of the late fourth millennium. The abstract designs on the earlier pottery, with their artistic intensity and great charm, are rich in prehistoric concepts and have far more in common with the symbolic world of the Magdalenian era (eight to ten millenniums earlier) than with the anthropomorphic myths of about a thousand years later.

Yet it must not be forgotten that vestiges of prehistory still cling to the anthropomorphic myths. Like the signs and symbols in the primitive world, they indicate the eternal polarity of life and death, and they are embedded in the cosmos. Now all have been given anthropomorphic form, and the stars themselves have become deistic personifications. This mingling of men and gods with the cosmos is the prime characteristic of myths.

One of the achievements of Julius Schwabe has been to release the myths (and with them the archetypes) from the psychological laboratory and restore them to their position in the cosmos. In his view the weakness of psychoanalysis — and of Jung's theory of the archetypes — is that "it never escapes from the psyche, from the subjectivity, which has become its self-created prison" (p. xxiv). Archetypes are reduced to "elements of the collective unconscious . . . without any recognizable relationships to the extrapsychic world, and hence simply and solely of psychological interest" (p. xxii).

Schwabe indirectly dates the rise of myths by defining the position of the planets from which, according to him, astrological theories arose. The symmetrical, harmonic disposition of the planets with reference to the north-south and east-west axes can hold good only "for a definite period of time, the second half of the Taurus period (ca. 3275–2200 B.C.). . . . The enormous importance of this primary disposition of the planets for symbolism as a whole . . . may be explained by the probable fact that it falls within that unique era when the myth-creating approach to the cosmos was still intact" (p. 19).

It must be added that we cannot accept it as self-evident that primeval man should have taken special note of a celestial constellation which was so strictly symmetrical and based so directly on the relationship of vertical and horizontal.

In primeval times, all directions in space had the same value, and the same right to exist. The fact that the symmetrical position of the planets with regard to the axial cross was noted at all can only be connected with the new discovery of the vertical as the principle of order.

THE POTENT SYMBOL

The golden age of the symbol was in prehistoric times, said Théodule Ribot, the French psychologist. "Since then it has been overwhelmed by the hostile pressure of rational

thought, which reinforced by experience and reason itself has steadily gained ground. . . . The *raison d'être* of the symbol lies in the human urge to express that which is inherently inexpressible" (1915, pp. 38587).

The essential nature of the symbol has always consisted in this urge to express the inherently inexpressible, but in primitive times the crystallization of a concept in the form of a symbol signified even more: the symbol was identified with the wish, the prayer, or the spell to be fulfilled. The symbol itself was reality, for it was believed to possess the power of working magic, and thus of directly affecting the course of events. The symbol portrayed reality before that reality came to pass.

Herein lies the contrast between the function of the symbol in prehistory and in later periods. In Greece the symbol was not only a means of recognition, it also developed a spiritual content and became an abstract concept. It was not an independent agent.

Bachofen calls the kinds of symbols found on Roman mortuary reliefs "reposing in themselves," that is, complete in themselves. The symbols employed in the Christian catacombs up to the middle of the fifth century A.D. embodied the hope of future bliss: wine signified the feasts of Paradise; a dove sipping water, the soul refreshing itself in the waters of life; flowering meadows, Heaven itself. These all point to the life beyond the tomb and are transcendental, whereas primitive symbols were neither complete in themselves nor transcendental.

It is difficult to determine the limits of symbolism in prehistory. It was believed to be a potent agent, and by force of sympathetic magic was called upon to help achieve a certain purpose, with positive results. Yet the border line between the symbol and other representations is indeterminate, as in the spellbinding forms of animals on cavern walls, with their inextricable mingling of magical intent and straightforward realism.

We are again approaching an age of symbolism. No one will deny the laws of logic; they are as valid today as yesterday. Yet we are compelled to ask: Does everything come under the sway of logical reasoning? Are there not many aspects of human experience to which cause-and-effect logic is not applicable? In considering history — even the life history of the simplest creature —we cannot help but observe how most actions evade a clear explanation in terms of cause and effect. We can always discover certain causes after the event, but we are unable to predict a future effect of a cause or the development with which our personal destiny is unremittingly involved.

Once again we begin to recognize the wisdom of bygone periods, when so much less was known but when the world was conceived as free and untrammeled, not confined within the bounds of logical cause and effect.

HANDS AS MAGIC SYMBOLS

Hands imbued with symbolic meaning appear in widely divergent cultures in every quarter of the globe. The most that they have in common is their human affinity. Any other direct connections they may have are seldom discernible.

The hand — the member of the human body that reaches farthest — shapes those things which give man a power widely exceeding his innate strength: tools, weapons, in short, all artifacts which distinguish his life from that of mere animal existence. That the representation of the hand, the limb capable of the highest formative skill, should simultaneously express special strength and magical significance seems almost self-evident.

In later cultures the meanings attributed to the hand became widely differentiated: first in Egypt and Sumer and later in India, under the influence of Hinduism, the various positions of the hand in dance and sculpture had a particular significance. The movement of the hands led to a ritual sign language developed from the sequence of their symbolic meanings.

PRELIMINARY STAGES

In the Aurignacian period, simultaneously with the desire for artistic expression, symbolic hands appear upon the walls of the caverns.

It may be that some of the undulating signs, pressed directly into the soft clay of the caverns, have the same significance as impressions of the complete hand, surrounded by color. Possibly they are their precursors.

94, 95

Near the entrance to the innermost recesses of the cavern of Altamira there is a short, low corridor (6.2 m. long, 2.1 m. high) which becomes ever narrower towards its end. Short linear signs, close together, cover the entire ceiling. The ever-moist clay receives every slight pressure, every vibration of a movement, and retains it. These signs are distinct from the long-drawn-out curves of other “macaroni.” They are short and lopped off, measuring eighteen centimeters or less. They seem to have been impressed in quick strokes: even today one can discern the pressure of fingertips at the start and marks of fingernails at the end of each unhesitating stroke. In a detail, the impression of three fingers of the left hand, with the long ring finger, is very distinct. Can these nervous

“exclamation marks,” in their determined and continuous repetition, mean anything other than urgent cries for aid, primitive invocations?

In the cavern of Pech-Merle, the Abbé Lemozi recognized the probable

42. ALTAMIRA: *Detail of “exclamation marks” imprinted in the clay with three fingers*

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representation of a left and a right hand pressed into the clay: shown by means of four separated strokes and the impression of one dent, which could well be the thumb. These are placed in relation to an animal (horse?) which is depicted in a similarly abstract manner.

43. ALTAMIRA: *Clay ceiling covered with "exclamation marks"* (L. *8–18 cms.*)

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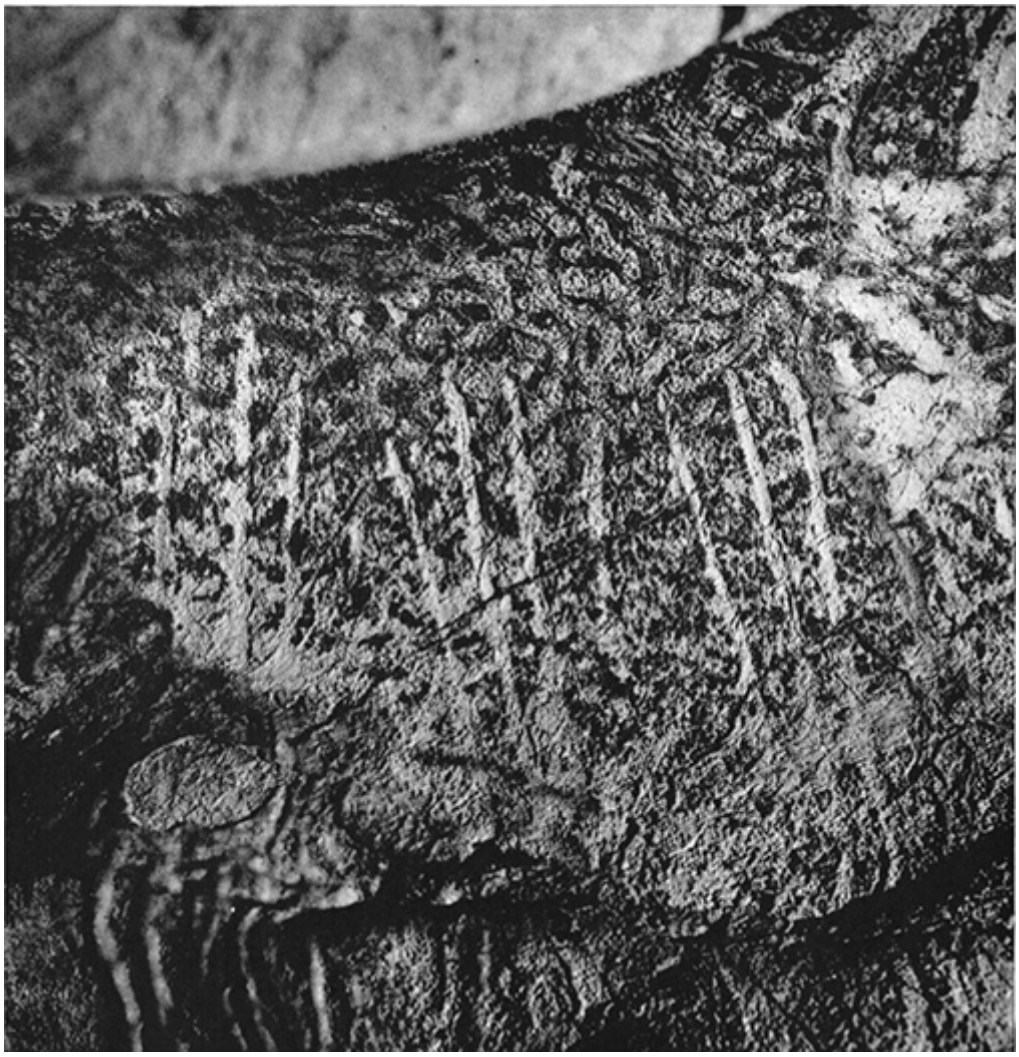
Four pronglike parallel lines hover linked together above the graceful yellow "Chinese" pony in Lascaux. They have been interpreted as a hand casting a spell over the horse. This completely abstract hand appeared in a period of highly developed painting.

In Altamira there is a similar representation of an abstract forklike hand in conjunction with a Magdalenian bison.

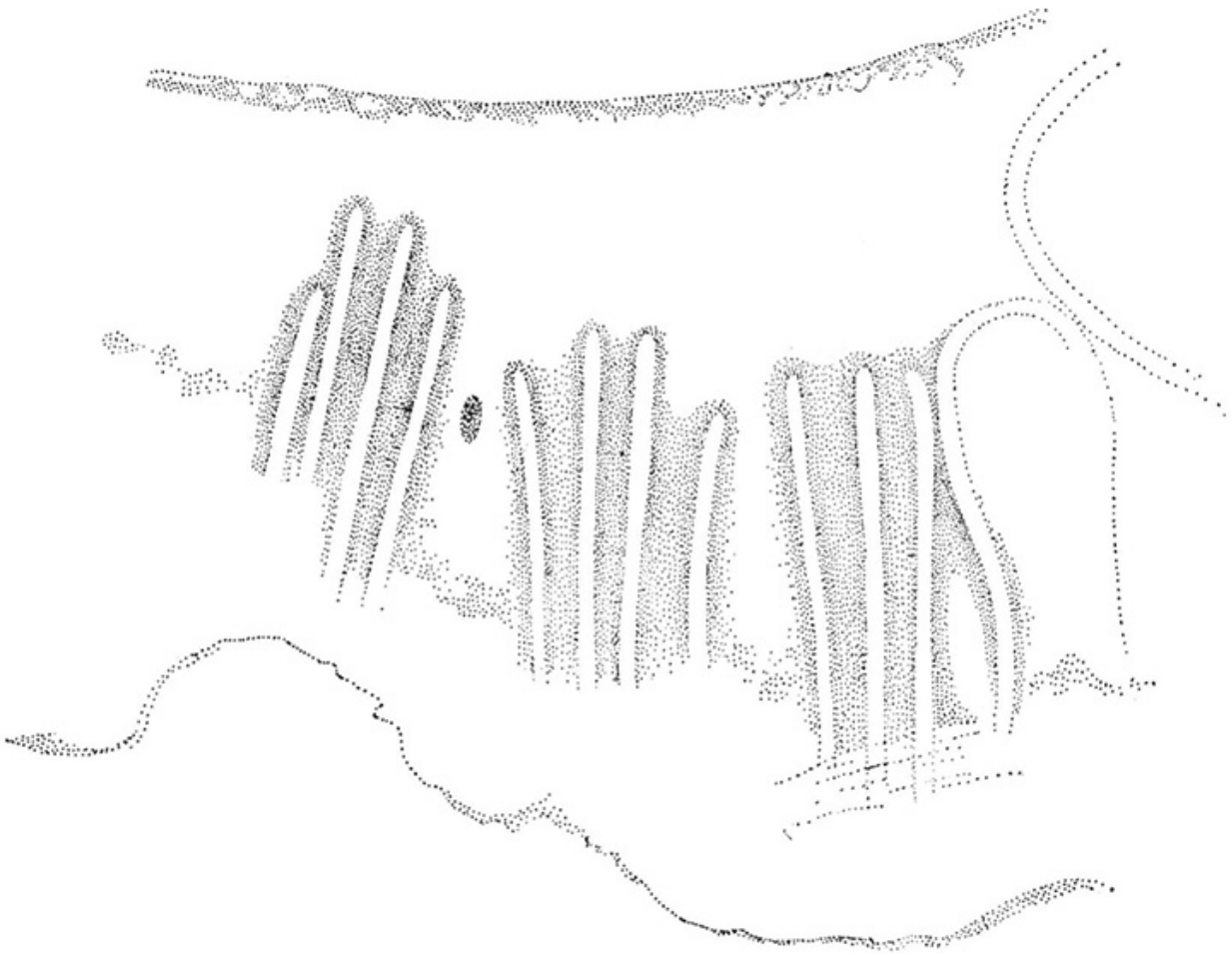
Any attempt at enumeration of the millenniums which lie between the clay impressions at Pech-Merle and the painted forms at Lascaux and Altamira can only be a guess.

HANDS OUTLINED IN COLOR

Relief impressions of hands in clay and abstract representations of hands are rare in comparison with direct images of hands painted upon the rock face with the aid of color, either in positive or in negative. Color here makes its first proud entry into the history of art. This invention was not inevitable. It is difficult for us today to realize the magnitude of this leap forward for mankind. We face the beginning of the art of painting.



44. PECH-MERLE (*Lot*): *Probably right and left hands, each with four fingers, made by strokes in the clay, and a mark possibly showing the imprint of the thumb*



Drawing for fig. 44

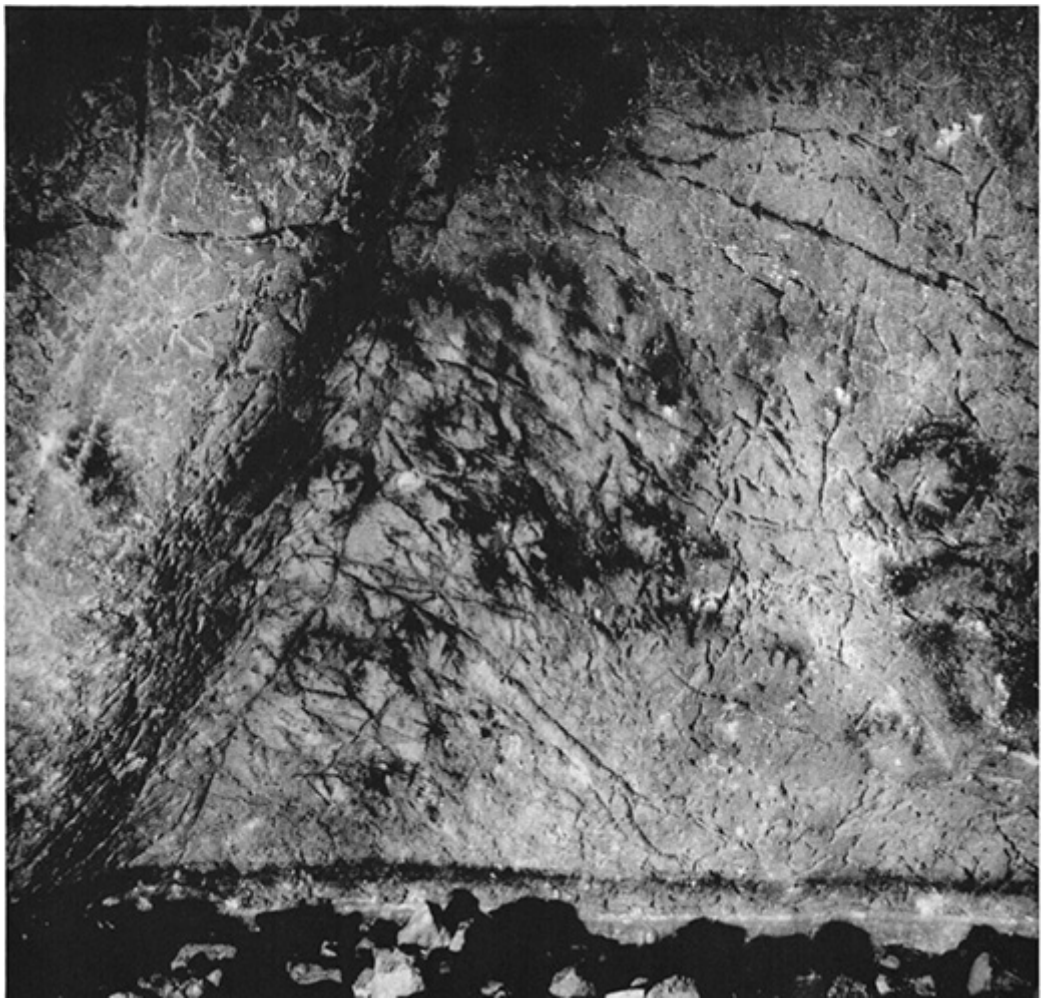
Positive impression: The hand is covered with red or black color and pressed upon the rock surface. Red ocher and blue-black manganese can be found in the rock folds of the caverns.

Negative impression: The hand is placed on the rock wall, and color is spread or blown around the outlines of fingers and palm. It is certain that this process was not done with a brush. This type of imprint was more favored and has a greater visual impact. Color so used has the possibility of greater radiation. It can also be thinned out on the fringes, strengthening the iconlike effect of the hand image, often with a magical, invocative force.

If any one thing can be said to illustrate the Aurignacian development, of which so many intermediate steps are lost to us, it is these color-surrounded hands: along the cavern walls, rising up from the floor and spreading like a column of smoke, or following along the folds of the rock formation like a frieze; and just occasionally upon the cavern ceiling.

Sometimes they appear singly, sometimes in conjunction with indecipherable symbols, often in conjunction with animals —and then a symbolic possessive power over the animals is made evident by their position. In cases where the hands are from an

earlier period, it seems that a reverent awe has prevented their being covered over by the later animal paintings. They still remain transparently visible.



45. GARGAS (*Hautes-Pyrénées*): *Clouds of hands surrounded by color, rising up the cavern wall almost from the level of the floor*

Hands in groups

The hands at Gargas: Nowhere have hands been found in such astonishing numbers as at Gargas. This cavern, in a northerly spur of the French Pyrenees, was already well known in 1905 when Felix Regnault first discovered some of the painted hands, near to the remains of numerous cave bears. They were then seen to be everywhere: near the entrance, in the middle of the cavern, and at its furthest extremity. In 1907 the Abbé Breuil, together with E. Cartailhac, counted 150 hands, not including those which had become faded or obliterated (Cartailhac and Breuil, 1910, pp. 129–48).

left

Near the entrance of this cavern at Gargas the hands are massed together in a cloud which rises from the floor and then spreads along the wall. They are separate imprints,

mostly of the left hand. The Abbé Breuil noted that 124 of the 150 he counted were left hands. Of these 76 are surrounded by black, 48 by red.

259 col

In the center of this cavern there stands a majestic hollowed-out column of rock. Probably owing to its resemblance to a chapel, the cave has come to be called the Sanctuary of the Hands. Here a few hands grasp at the curtainlike folds of the rock formation.

Most of these hands have been mutilated. In some only the three middle fingers remain, in others only the middle finger itself remains.

There is no trace of any animal or other configuration in connection with these hands. Almost all are deformed. Their appearance has been likened to the ritual self-mutilation ceremonies of certain primitive peoples existing today in which one or more of the finger segments are cut off. This self-mutilation always betokens a sacrifice to ward off some evil, whatever the reason —averting an accident, preventing the dead from seeking vengeance, an initiation pledge, a hostage for the success of some action; sometimes there is a requirement as to which joint has to be cut off in connection with certain events.

46. KAP ABBA CAVE, DAREMBANG (*New Guinea*): *Negative hand impressions on cavewall*

This sacrifice has always signified a request for protection. The cloud of mutilated hands at Gargas stands there like a tragic chorus, eternally crying out for help and mercy.

102, 103

The hands at El Castillo: The cavern of El Castillo, about twenty miles from Santander, in northeastern Spain, was investigated in 1903 by Alcalde del Rio and in 1906 by Breuil. All periods of prehistory, from the Acheulean to the Azilian, have left their traces here. Along an undulating wall stretches a frieze of hands reaching up to the

ceiling. Here the hands are not alone, but accompanied by *ponctuations*, symbols, and animals.

This wall presents an amalgamation of the work of widely separated epochs. Most of the hands, which are predominantly outlined in red, have faded very much, except for those which have been protected by a crystalline film. This is also the case with most of the tectiforms. Only one large symbol in a long-protracted curve shines out. Many other forms have become obliterated.

With great care, Breuil in 1911 made drawings of the distribution of hands in the Castillo cavern (Alcalde del Rio, Breuil, Sierra, 1911, p. 117), including *the frise des mains*, as he named this wall (ibid., pls. 66/67). The barely visible outlines of buffalo, dots, and tectiforms pass on the legacy of each epoch to its successors, but the hands are the oldest of all the signs. An abiding reverence seems always to have protected them from complete destruction.

The single hand

The iconlike character of the hand and its power of magical invocation is most strongly expressed when a single hand, surrounded by an aureole of color, is depicted in isolation —in a place of its own.

104

The great rock column at the center of the hall in the Gargas cavern, containing several mutilated hands on its hollowed inner surface, has, upon its outer side, a small niche. In this recess a left hand, heavily outlined in black, appears like a votive image. All four fingers have been mutilated. Only the thumb remains intact.

106, 258 col, 26

Another isolated hand in the “throne room” of Pech-Merle also produces an effect of grandiose simplicity. It is painted upon a block of stone within an aura of red ocher, which is further surrounded by red disks like a constellation of stars. The unity of stone block and image creates an unmistakable impression of monumentality. From here the eye is inevitably drawn to a scene on the underside of a neighboring block, where small-scale abstract outlines of horses, bison, and fragmentary mammoths are also surrounded by red dots.

Is there any connection between these abstract animal forms and the erect and dominating hand nearby? It is difficult not to believe it. The Abbé Lemozi places both representations in the early Aurignacian period.

105

One of the most sensitive hands of primeval times is spread out upon the low ceiling opposite *the frise des mains* at El Castillo. This is again a left hand (21 CMS.). Its slender, delicately formed fingers splay out over the rock as though casting a spell. The curve between thumb and forefinger is of consummate beauty. The shape of this hand is

no longer the result of a simple imprint. It appears to have been refined and perfected with the aid of a brush. Here in a fragment is a grace which in prehistory is never found in the full human figure.

This hand reveals something of the spiritual refinement which must have existed in *Homo sapiens* when he strove to project his inner self through a supra-individual means of expression: Art.

This hand at El Castillo reminds one of Henri Focillon's "éloge de la main": "Hands are almost living beings . . . endowed with a vigorous, free spirit, with a physiognomy. Eyeless and voiceless faces which nonetheless see and speak. . . . The hand means action: it grasps, it creates, at times it would seem even to think" (1948, p. 65). Do these words not impart the inner meaning of symbols in primeval times?

99

Towards the end of the Aurignacian period the custom of reproducing negative or positive hand impressions came to an end. The Magdalenians followed other paths. However, to make direct impressions of the hand is a worldwide custom, a custom which survives even today in areas as far apart as Australasia and America. An expedition led by the Frobenius Institute discovered entire cave walls covered with negative hand impressions. These caverns at Darembang, New Guinea, are situated high above sea level. The hands represent a phenomenon parallel to that of the cavern of Gargas. But here the hands spread everywhere, even upon the ceiling, and are interspersed with negative impressions of feet, somewhat similar to those which were so frequently carved into the rock during neolithic times. In Darembang, hands are not so much organized in clusters or groups but form an amorphous accumulation of imprints, which could hardly represent a single period of time.

Drawing for fig. 48

47. EL CASTILLO (*Santander*): *Cavern wall covered with hands*

48. EL CASTILLO: *Detail of the wall with hands accompanied by symbols*

49. GARGAS: *Isolated single hand with mutilated fingers, surrounded by black, within a rock niche*

50. HOPI INDIANS: *Bowl from the ruins of Sikyatki village, Arizona*

51. EL CASTILLO: *Sensitive left hand, open, on low ceiling*

The case of Indians of the American Southwest is not very different. In contrast to the hands of the Aurignacian period, their hands do not represent the earliest beginnings of American primeval art, even though some hand impressions have been found upon baskets from the late Basket Maker time, A.D. 300–500 (Wormington, 1947).

In one Arizona cave there are innumerable hand prints —over 150 have been counted on one twenty-foot stretch of cliff wall. Their prevailing color is red, and many "are entirely out of proportion; that is, too large and with excessively long fingers, or the fingers are much too thick. . . . Six-fingered hands are present, though rare. . . . There are no examples of negative hand representation . . . nor are there any clear cases suggesting mutilation of the hand, such as the amputation of fingers" (Haury, 1945, pp.

65, *66)* . Even approximate dating of these hand imprints is impossible; but, in the main, they coincide with the final stage of the pre-Columbian era.

52. PECH-MERLE: *Red-encircled left hand on boulder accompanied by red disks*

104

Hands are sometimes depicted with great artistic refinement upon American Indian pottery, such as a bowl from the ruins of a Hopi village called Sikyatki, in Arizona.

This late artifact bears no relation to the El Castillo hand, other than the sensitivity of its presentation, which is expressed most forcefully in the strongly abstract treatment of the bird encircling the hand in its spiraling flight. On the outside of the bowl, accompanied by abstract signs, is an outstretched hand with an arm, bent at the elbow joint to a right angle.

ON THE MEANING OF HANDS

The meanings of hands cannot be exactly determined: they are manifold. Images of the hand, whether mutilated or complete, always express a supplication to invisible powers —no matter how various the immediate appeals may be (protection, the averting of evil, aid in the success of some enterprise). Such an explanation as that the impressions of the mutilated hands at Gargas could have been produced by folding over certain fingers relates neither to the period nor to the circumstances.

There must have been a reason why some of the hands are outlined in red and others in black, often side by side; but we have no clue to the meaning of this alternation of color. Pleasure in color variation was certainly not the reason.

On hands and animals

108, **109**

The hand placed in relation to animals may signify both a wishful seizure of the desired quarry and an invocation for fertility— for an increase in the numbers of the animals themselves. Two pregnant ponies form the main subject depicted on the flat front surface of an altarlike rock in the large hall of Pech-Merle. They are surrounded by six hands stenciled in black, some right, some left hands. The two best-preserved hands are above the backs of the horses; a right hand to the right, a left hand to the left.

111

In the rock shelter of Cap Blanc (Dordogne), a rather damaged hand with long fingers has been discerned above one of the damaged horses near the entrance. If the interpretation of the sign is correct, this hand would form

159

something of a counterpart to the stone ring placed in a similar position above one of the horses to the extreme left of the shelter.

An engraved hand in the cavern of Barabao, at Le Bugue, on the Vézère a few miles from Les Eyzies, is more clearly defined. It may have partly originated from the clawings of the cave bear. If this is so, it would be another instance of seeing a form in the rock and adapting it to form a symbol.

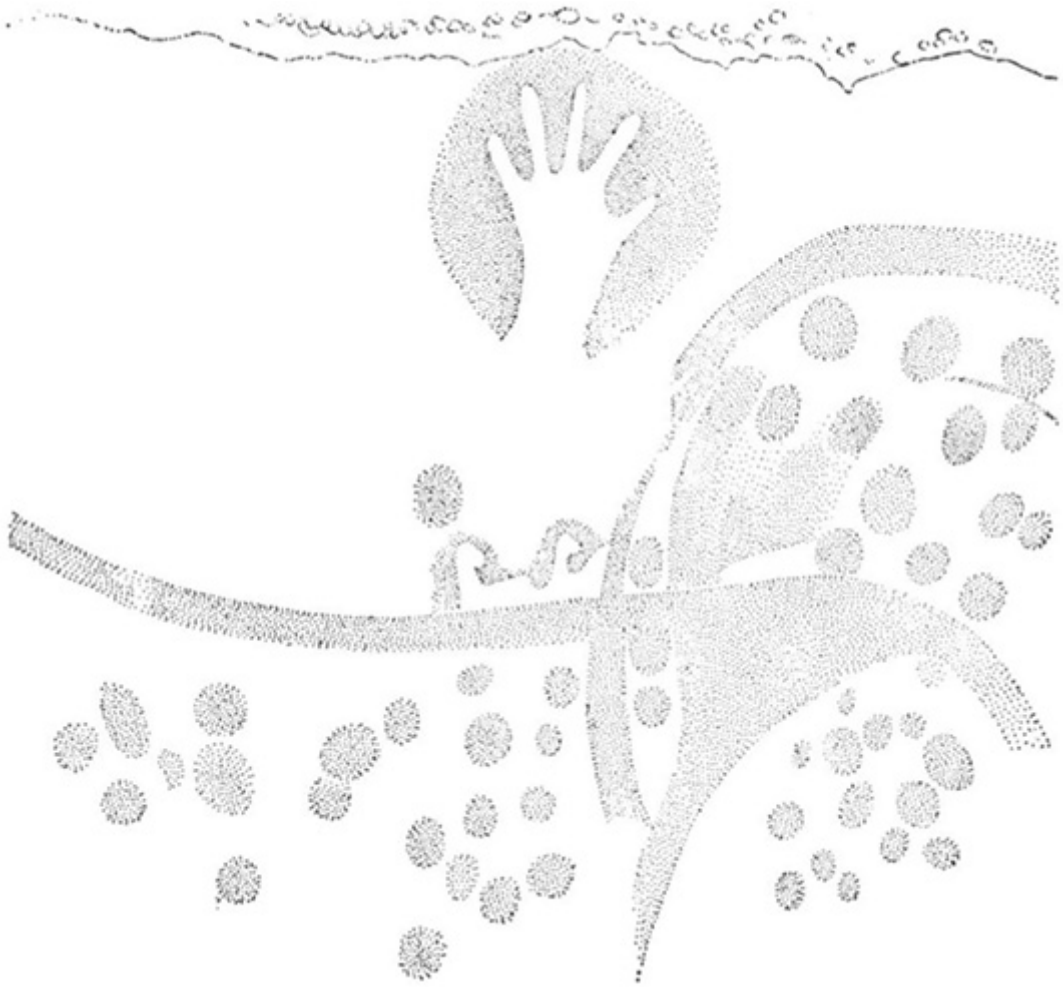
111

In Laugerie Basse (Dordogne), an amulet was even found in the form of a hand. This is a Magdalenian carving on an antler tine, depicting a small hand and forearm (7 cm.).

In later civilizations the hand is considered the giver of life and of strength. Long-vanished prehistoric memories may play a part. Onians, in *The O rig ins of European Thought*, frequently repeats that the hand represented "the procreative life-soul" (1951, p. 494). Zeus begot Epaphos upon Io, he tells us (after Aeschylus), "with a touch of his hand" (p. 495). "The hand was for the Jews, with the knees, the seat of strength or of 'life,' both of which were naturally associated with the seed. . . . When Potiphar's wife invited Joseph to lie with her and he suppressed his desire, 'the seed came out of his finger nails'" (p. 494).

Right and left hands

The statistics worked out by Breuil in the caverns of Gargas and Castillo show more left hands than right. A common explanation of this —that man, even then, was right-handed and could therefore use his right hand more easily to paint than his left — is all too facile, quite apart from the fact that a number of right hands also exist on the walls. This is another instance in which materialist interpretations cannot give us insight. The meaning of the left hand must be sought among certain ancient customs, as reflected both in utterances and pictorial representations.



53. PECH-MERLE: *Black-encircled left hand above one of two ponies, painted with thick, black outlines; also many large black spots* (*drawing of detail from fig. 88*)

54. PECH-MERLE: *Black-encircled right hand just above the back of the pony to the right of the preceding figure* (*detail from fig. 88*)

Bachofen considered the left hand to be "the symbol of the maternal aspect of matter" (1954 edn., p. 209). In support of this he cited Pliny, who linked the left side of the human body with the female principle. In suggesting relationship with the Mother Goddess, Bachofen referred to a passage in Apuleius recounting how, in the Egyptian procession of Isis, "the Egyptian Great Mother," the priests carried a large representation of a left hand (p. 206).

That Bachofen was justified in his views on the significance of right and left hands — which he stressed frequently— is supported by recent researches. "It goes beyond the realm of a single world creation myth to an almost universal conception of mankind that the right side is regarded as male and the left as female" (Baumann, 1955, p. 293). How far the belief that the right hand represents the male and the left the female is reported by Baumann in his chapter on "Twins," where he deals with the theme of the "mythical bisexual halving of man and god" (p. 337), and also in his chapter on "Right-Left" (pp. 293–310).

122

There is an early cylinder seal dating from the beginning of the third millennium B.C., whose presentation points to its early origins: some figures are "standing on their heads," and two gods have masklike visages. On this seal a more than life-size left hand

is depicted; before it, apparently in veneration, is a naked figure. Large hands are mentioned in the later temple courts of Assyria as objects of adoration. The fencelike surrounding base of the hand on the early seal would seem to betoken an enclosure of the sacred precinct.

439, 441, 509, 473

The astonishing domination of the left hand, not confined to the Aurignacian-Perigordian era, may well be related to the meaning later attributed to it. The Aurignacian-Perigordian is renowned as the period of female figures — from the Venus of Brassempouy to the Venus of Savignano, from the bird-headed goddess of Pech-Merle to the high relief of the Venus of Laussel.

HAND AND ARM AT SANTIÁN

259 col

An interesting extension of the symbol of the hand can be found in the seldom-visited cavern of Santián (Santander), a few miles from Altamira. This is a very special case. Here there are no longer direct impressions of hands, but conscious abstractions which are developed into forms that cannot be given any definite naturalistic interpretation but which have been variously termed claws, hoofs, and boomerangs.

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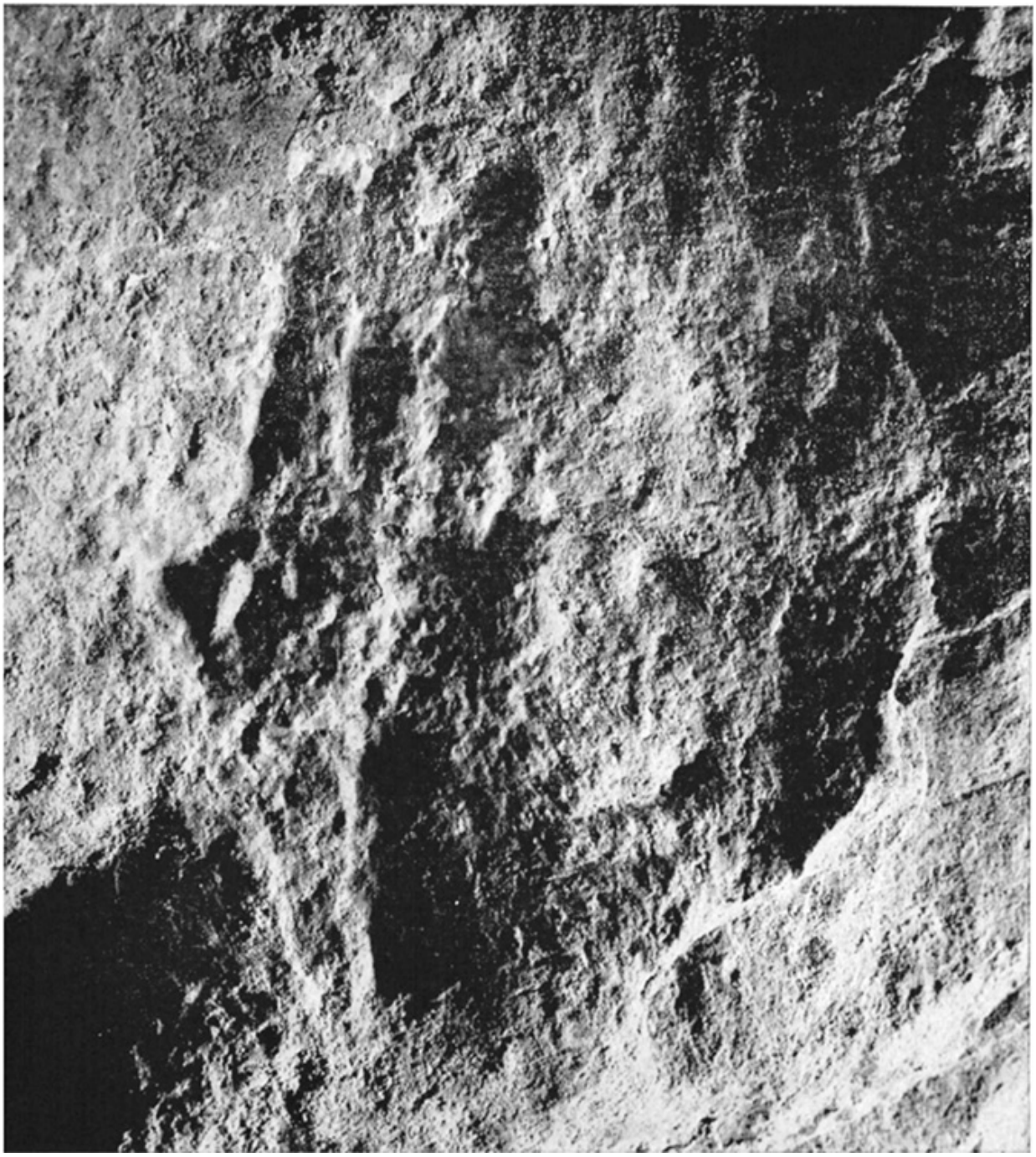
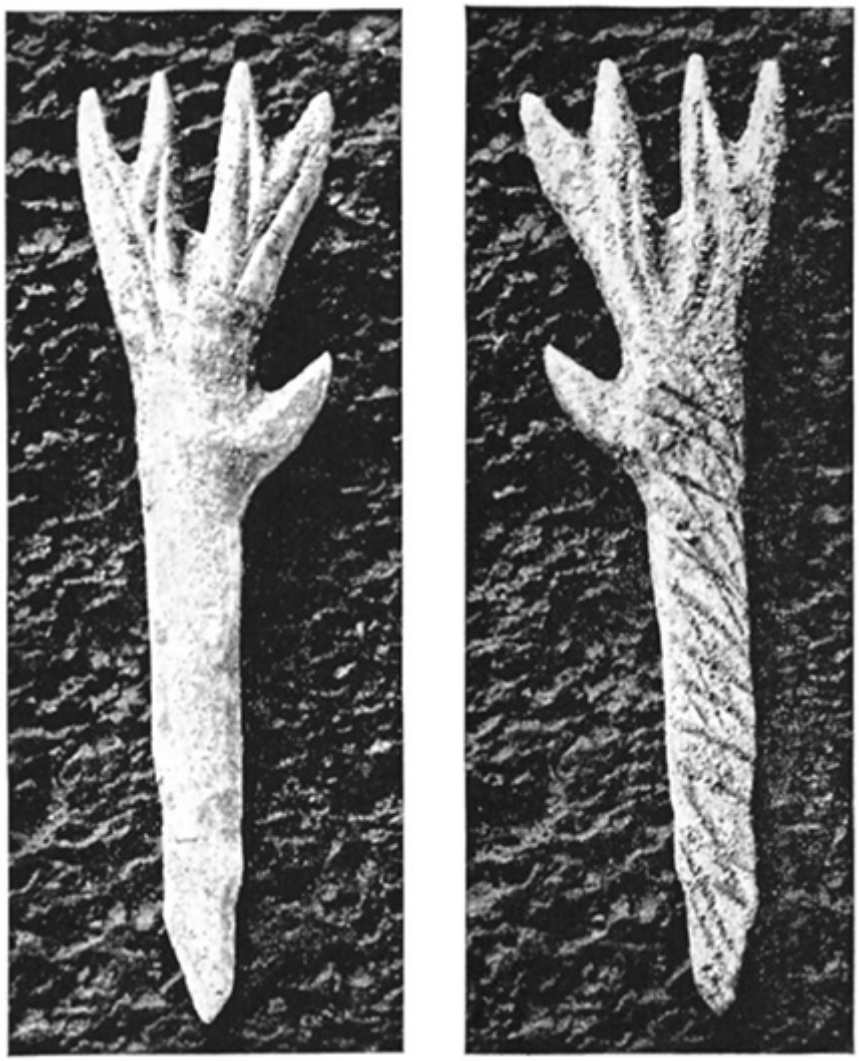
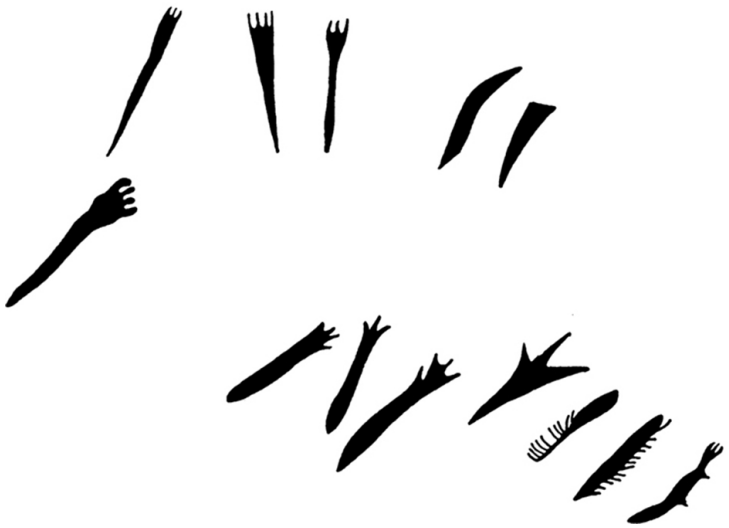
These red signs are organized in two rows, five in the lower and ten in the upper row, in the remotest part of the small and low cavern of Santián, just below the ceiling. All are painted upon a strongly curved shoulder of rock. With the eye of the camera they can only be reproduced distortedly, and Breuil's drawings (Alcalde del Rio, Breuil, Sierra, 1911, figs. 32–35, pls. XXIV-XXVIII) give a much clearer impression of them than the photograph.



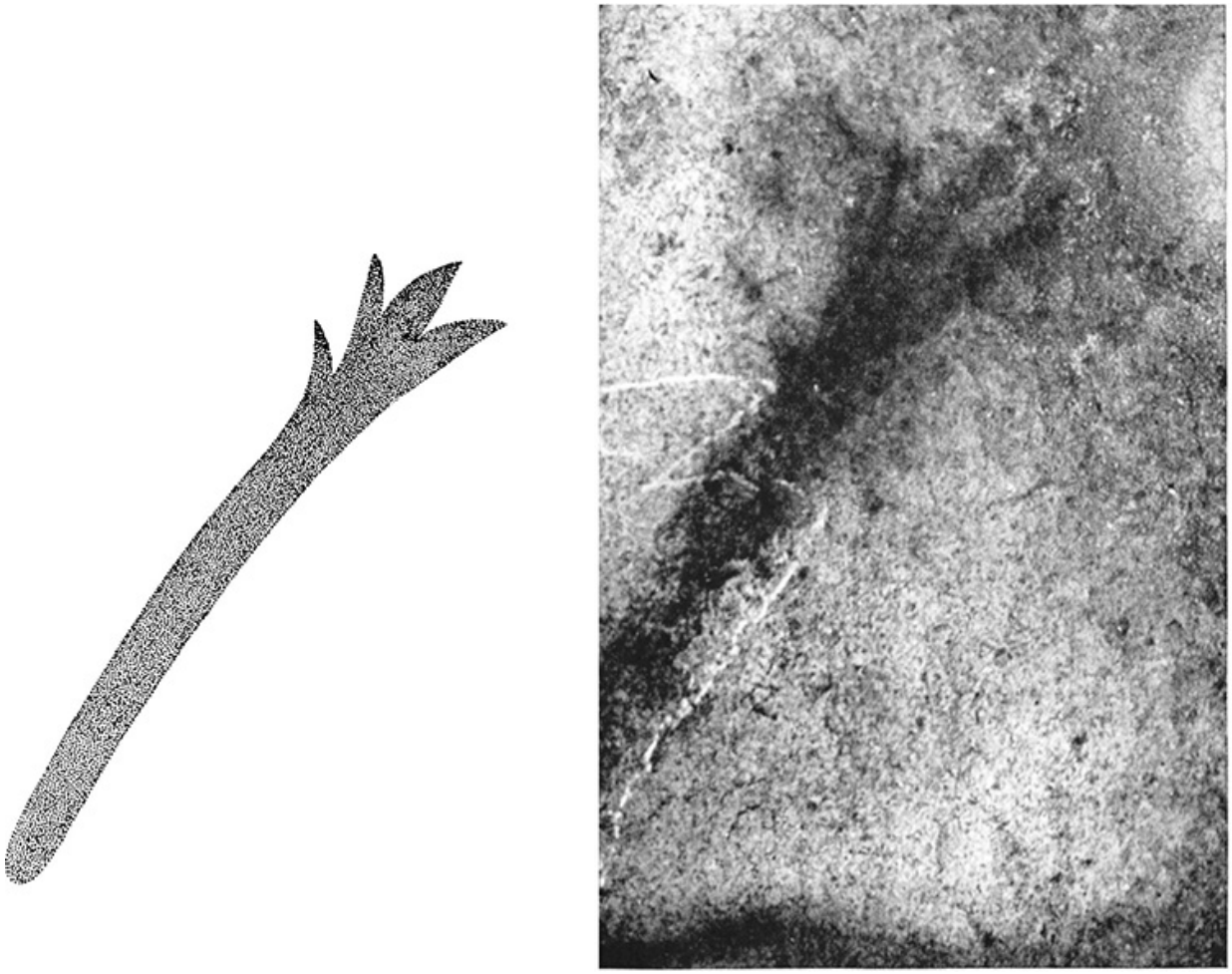
55. CAP BLANC (*Dordogne*): *Fragmentary hand above one of the horses*



56. LAUGERIE BASSE (*Dordogne*): *Magdalenian hand carved from antler tine* (*7 cm.*), *front and back view*



57. SANTIÁN (*Santander*): *Red-painted signs, most of them abstract hands. With drawing by Breuil*

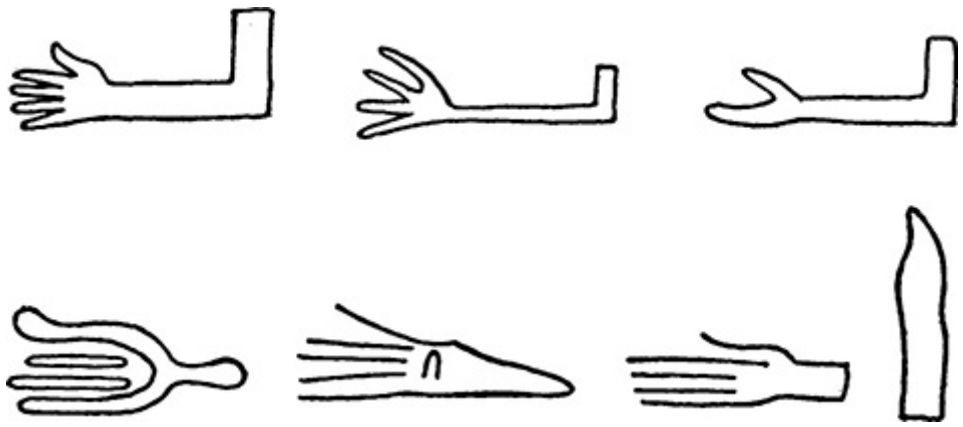


58. SANTIÁN: *Arm and hand showing three flowerlike fingers and a thumb. With drawing*

left

Five of the signs, without doubt, represent a hand with a forearm. But even these unmistakable signs are completely unnaturalistic and grotesque in their proportions and shape. One undoubted hand has three very short fingers, a greatly elongated palm, and a widely separated thumb; another has only four fingers and the curving outline of the hand; a third has four rounded fingers "reminiscent of toes," as Breuil describes them.

Beside these easily recognizable signs are others, still further abstracted, which do not permit of any exact interpretations. No two signs are alike. But they have two things in common: all have stalks, and none directly represents natural forms.



59. EGYPT, *First and Second Dynasties: Hieroglyphs of arm, hand, and finger*

60. EGYPT, *Predynastic: Slate palette*

What period do they belong to?

Breuil puts them in the earliest Aurignacian. “Our impression of paintings as barbarous as these of Santián is that they are a throw-back to extreme antiquity and must

be attributed to the very beginnings of Aurignacian art" (p. 35). From the stylistic point of view it is very difficult to assent to this opinion. The forms themselves are very differentiated. They have little in common with the strong but simple abstractions that one finds in the early Aurignacian period.

61. LOS LETREROS (*Almería*): *Hourglass-shaped figure with no head and flowerlike hands and feet. Drawing from Breuil, 1935*

A variety of attempts have been made to interpret the abstract forms of these hands and signs. G. H. Luquet explains them as due partly to the curvature of the rock wall, which made it difficult to make direct impressions of the hands, and partly due to what he calls "fruitful clumsiness" (*maladresse féconde*). By this Luquet means the enrichment of children's drawings by the elaboration of original mistakes (1930, p. 133). Somehow these remarkable signs at Santián seem to have disturbed Breuil. He undertook something he seldom attempted: he sought to find similar examples among the paintings of contemporary primitives. The appearance of some Eskimo tools and Australian aboriginal paintings is astonishingly similar. Unfortunately these cannot give any nearer clues to the period of their original inspiration —whether this came at the beginning or at the end of prehistory. The question of their period of origin did not become any clearer when, in October, 1953, improvements to the entry of the cavern of Santián uncovered some remains of animal bones and also a human skull. This was at once placed in the Aurignacian period by Spanish anthropologists (Andérez, 1954). H. V. Vallois says, however, that the markings of the skull do not permit one to attribute it

with certainty to the Aurignacian period, and he adds: “Neolithic man also buried their dead at the entry to caverns” (1955, p. 117).

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If one compares the signs at Santián with the oldest forms of the Egyptian hieroglyph for arm, hand, and finger from the First and Second Dynasties (Hilda Petrie, 1927, pl. VI), one finds in the original forms of this sign writing the same unconcern with consistent execution as at Santián. Whether the hand has two, three, four, or five fingers, whether it is depicted naturalistically or as an unrecognizable stump, is of no consequence. These hieroglyphs of around 3000 B.C. carry on the customs of prehistory, and it is astonishing how close what at Santián was once called a boomerang comes to what is known to represent a finger in Egyptian hieroglyphics. In certain cases no links can be traced, but in general they are rooted in the traditions of the vanishing neolithic age.

Morphologically, the most interesting are the plantlike or starlike signs at Santián with three and four points. Do these signify hands? Did they originate early or late in prehistory? Have they their counterparts at the earliest dawn or the latest dusk of primeval art?

This question crops up under most different circumstances, for both at the beginning and at the end of primeval art, strongly abstract and exclusively abstract forms appear, and it is by no means easy to distinguish one from another.

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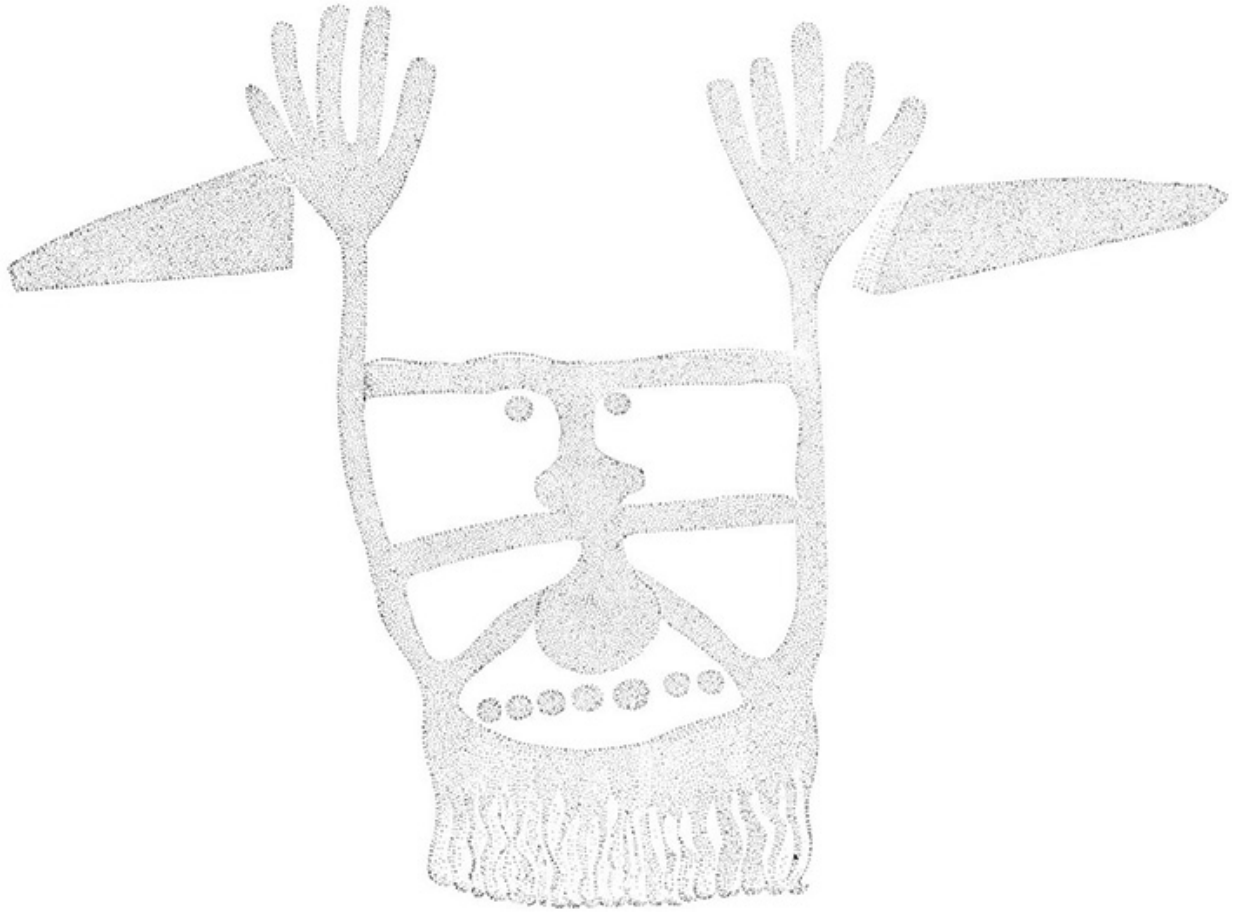
In this case there are certain indications which show that these plantlike or starlike forms belong to the late neolithic period. There is a slate palette from the Amratian culture of Predynastic Egypt which has been variously interpreted. It depicts a trapezoid surmounted by two upward curving arcs, each terminating in a five-pointed star. Two stars project from either side of the trapezoid, and another is placed within it. Flinders Petrie, who discovered the palette, believed it to represent the head of a cow with five-pointed stars on its horns and ears (1912, pl. IV, fig. 7). In contrast, Max Raphael said: “In reality we are dealing with a representation of the upper part of a woman’s body: the five-pointed stars are on her breasts and replace the fingers that would terminate her upraised arms, and the six-pointed star replaces her head (signifying partial ceremonial dismemberment)” (1947, p. 87).

Head of a cow or body of a woman? In terms of the close connection of the Egyptian mother goddess Hathor with the celestial cow it could represent both. But this astral-like figuration in its whole appearance, with the oval curve of its upraised arms, is more closely akin to the female figures that appear so often on painted ware about this time.

114

This attitude, with high raised arms and only token heads, recurs also in Amratian statuettes. But there is something further which we may note: arms that end in stars or in starlike shapes and headless figures whose bodies have become geometric are found in the eastern Cantabrian (Spanish) art of the final neolithic period. In the cavern of Los Letreros, Vélez Blanco (Almeria), there are hour-glass-shaped figures without heads which appear to writhe in an ecstatic dance, their arms and legs swinging out in great curves: all four terminate in starlike, plantlike forms (Breuil, 1935, IV, p. 15). These are most likely apparitions from the world of demons whose origins are unknown to us. Breuil suggested that these interlocking figures represent genealogical relationships. Carl Schuster too, in his extensive studies of the origins of heraldry, sees them as an assembly of ancestor figures (1958).



62. MONTE BEGO (*Maritime Alps*): *Demon with upraised hands and two daggers. Drawing after Louis, 1950*

The signs at Santian conceal evidences of more formulative power and more integral development than appear at first sight.

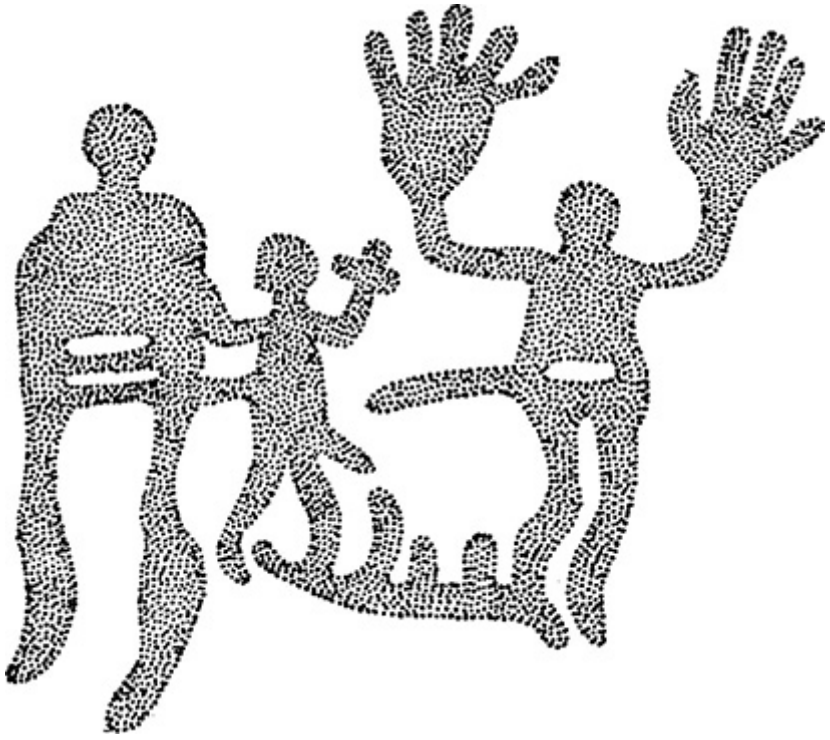
THE GESTURES OF THE HAND

From the hand and forearm it is not far to gestures of the hand: an even more expressive symbol than the hand alone. The gesture can ward off or protect.

The gesture of warding off evil

left

A demonic visage from the bronze age, 1600–1400 B.C., typifies the sign for averting evil (Louis, 1950, fig. 22). This demon is the best known of the more than five thousand rock paintings which have been counted on Monte Bego, in the Maritime Alps, not far from Monaco. All are above the tree line, over six thousand feet. These signs were the work of a settled agricultural community. They are greatly retarded in time but, just for this reason, they are able to afford us insight into an earlier, long-forgotten era.



63. BOHUS (*Sweden*): *"Five-fingered god" averting the evils of winter and imparting the strength of the summer sun*

64. EGYPT: *Early hieroglyph of the ka*

65. JAPAN: *Buddhist ritual gesture "which grants the absence of fear"*

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The demon is shown full-face with some indication of a beard. His mouth is wide open, his teeth are bared. The outlines of his cheeks are combined with the lines of his emphatic, upraised arms. The fingers are spread wide apart. A dagger projects from either hand. This grotesque masklike face is intended to frighten off evil and bad spirits and in no way as a threat to human beings. Demonic masks of this period with similar significance are also found elsewhere in southern France (Glory, 1948, pp. 93–94). Their ancestors are the grimacing faces from the Magdalenian era at Les Combarelles and many other caverns. A written testimony of their purpose as terrifying demons or genii can be found in early Babylonian texts, in which opening the mouth, baring the teeth, and pointing the beard served the very definite function of warding off evil spirits (Contenau, 1940, p. 210).

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Large raised hands, disproportionate to the body, constitute a well-known feature of certain rock engravings in Norway. Here the god with his five outstretched fingers is, in another way, reminiscent of the Egyptian hieroglyph *ka.* Perhaps these hands serve not only to impart strength but also to ward off evil — like the demon from Monte Bego.

117

Gestures with enormously enlarged hands appear also in the numerous rock drawings of Sweden, known for more than three hundred years. These gestures usually form part of a larger scene. On one of the countless rock engravings in southern Sweden, we are struck by the huge upraised hands of a male figure, three times as large as the head. In contrast, a figure to the left (not shown) has only stumps of arms, the next is completely armless, and the small figure (seemingly linked to it) raises a mutilated hand. This small figure, like the large-handed one to the right, is also linked to a symbolic boat.

Scandinavian rock drawings had been variously interpreted before attention came to be concentrated upon the seasonal myths as the key to their particular purpose (Schultz, 1914, p. 324). This brought all the associated objects — wheels, ships, wagons, men, animals —into conjunction. Sun worship forms the background. The ship traversed the heavenly ocean, the wagon traversed the heavenly meadows: both were simultaneously the sun itself.

This particular engraving is given a meaning relating to the winter solstice and the end of the old year: "The figure with five-fingered hands raised in benediction could represent the good, fruitful season" (Lohse, 1934, p. 36). It is a gesture of averting the evils of winter from the earth and imparting to it the strength and fertility of the summer sun.

The Egyptian dwarf-god Bes is now firmly recognized as one of the originators of prehistoric rites still preserved in cult and magic (Jesi, 1958). In Egypt, where human beings are represented in their radiant youth, the god of music and dance, Bes, is depicted as a deformed dwarf with a demonic face, a beard, projecting teeth, swollen belly, crooked legs, dislocated feet, and a leopard's tail (Drioton and Vandier, 1938, p. 80). This representation doubtless harked back to the age-old tradition that evil spirits could be kept away by the playing of musical instruments. How stubbornly this tradition persisted in Egypt can be seen in the fact that even during the New Kingdom the grotesque figure of the god Bes was painted on prayers, "as his presence was sufficient, in the mind of Egyptians, to keep evil spirits away during the absence [of the individual] in sleep" (p. 471).

The gesture of imparting strength

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The gesture of imparting strength is akin to the gesture of warding off evil. The gesture of imparting strength by the laying on of hands cannot be proved to have existed before the high civilization of Egypt. It is closely connected with taking over possession by casting a spell. A middle Magdalenian representation upon a flat piece of bone from Laugerie Basse already suggests this. It has been called "la pêche miraculeuse," and the scene suggestively presents the magical capture of a fish. With the drawing of this, from 1900, which we reproduce, occurs this description: "a large fish occupies the upper portion of the piece . . . (only the lower part remains, the rest is broken off). Below one

perceives a human form, very roughly drawn, having an immense arm, at least three times longer than the rest of his body. . . . A huge arm with a huge hand, parallel to the first one, is in an analogous position. . . . In front is another rudimentary human figure, which also has a huge arm cut off by the fracture of the bone" (Girod and Massenát, 1910, p. xiv).

It is naturally no *manque de proportion* when the arm is three times as long as the body and when the fish is much larger than would be normal for one caught in the Vézère River. What is here presented is a highly expressive gesture of capturing: three times repeated. No spear, no harpoon, no weapon, only the magical gesture of the outstretched arm. Nowhere else in primeval art, so far as is known, has the meaning of this gesture been more clearly revealed.

This is an early case of exercising human will over the animal by means of the gesture of the outstretched arm. The projection of strength from man to animal by means of this gesture is transformed in the high civilization of Egypt into a gesture projecting from man to man and from god to man. Seldom in any art is the gesture of embrace found so often and with such fervor as in Egypt.

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The sign for imparting strength became symbolized by a spiritual abstraction: the hieroglyph for the *ka*, consisting of two vertically outstretched arms, the hands with close-pressed or outspread fingers, linked by a horizontal curve.

66. LAUGERIE BASSE (*Dordogne*): *Fragment of shoulder blade with engraving showing magic capture of a fish. Drawing from Girod and Massénat, 1900*

(The significance of the *ka* and its deep influence on Egyptian thought will be treated in our second volume.) The *ka* has been considered in various ways, especially as a "vital

force" (Frankfort, 1948) which was imparted by the god to the king and by the king to his people. The hieroglyph for the *ka* is the symbol of action, of imparting strength, which the god fulfilled by laying his arms upon the king from behind him. The *ka* is one of the hieroglyphs which depart from direct optical impression. Its form probably arises because it, like hieroglyphs for the hand, is rooted in the abstract art of the neolithic period.

A symbolic language of gestures of the utmost variety has developed in India from the sacred dances of the fifth century B.C.: i.e., relatively very late. Every gesture, every finger has its special meaning.

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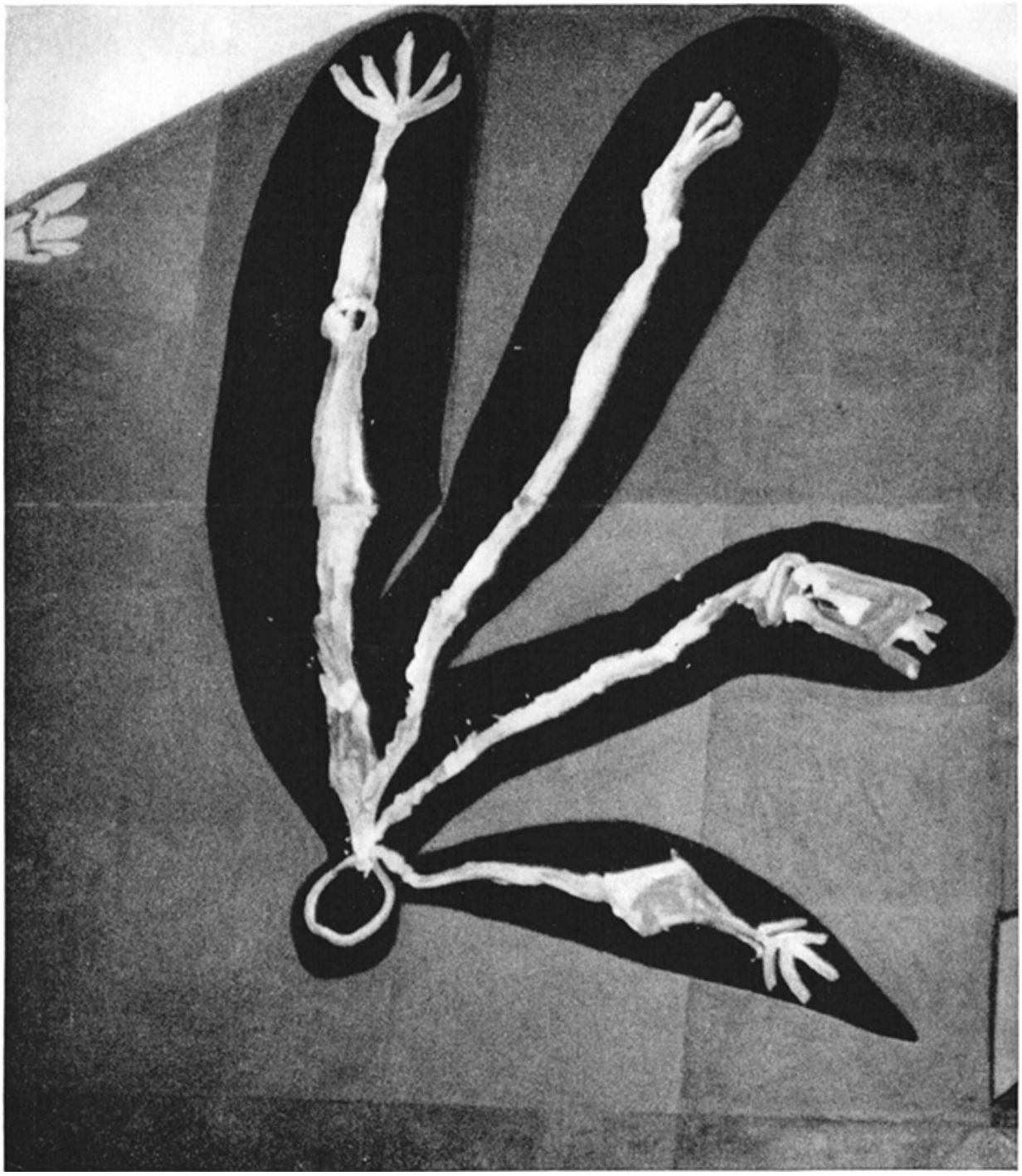
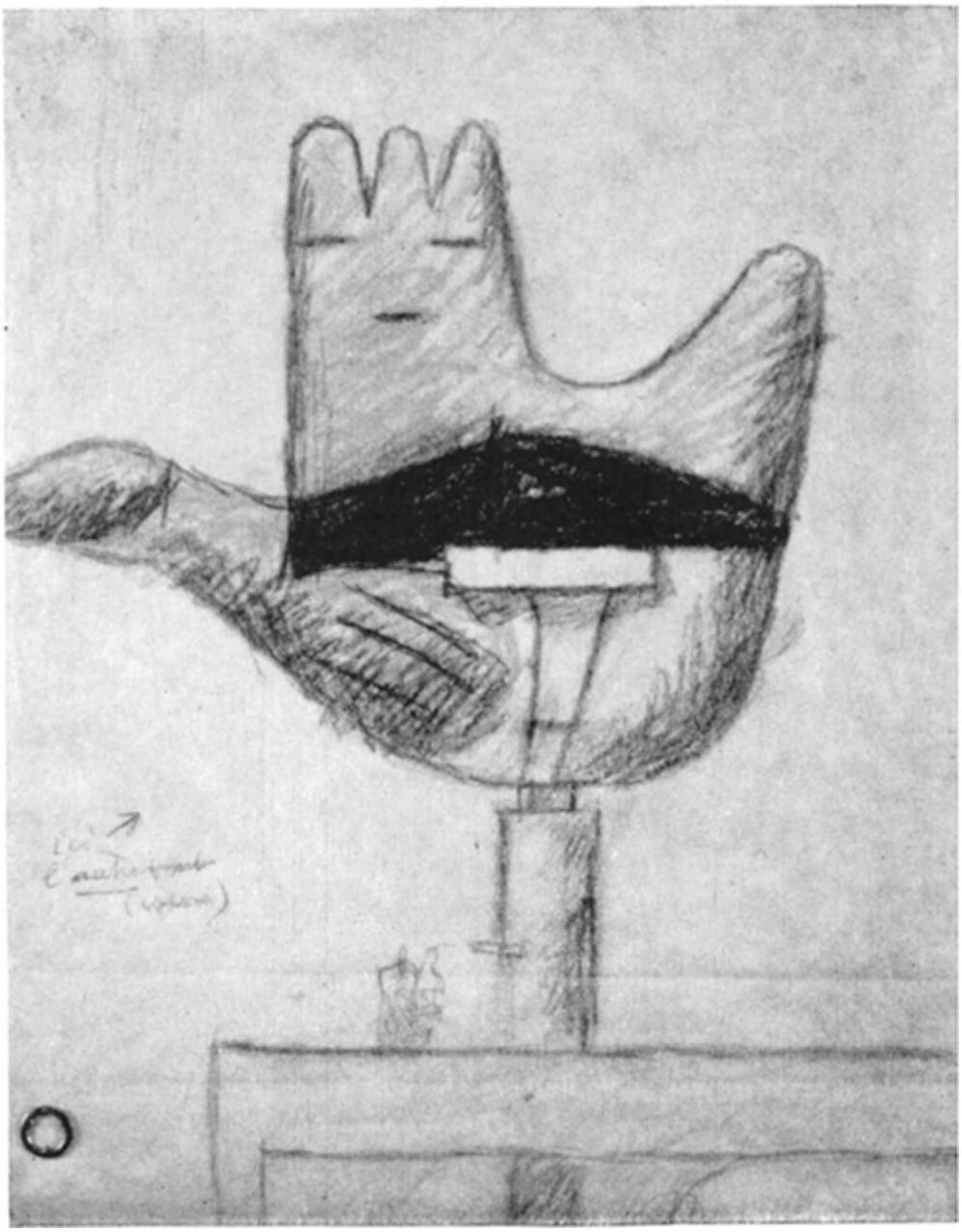
The most impressive is one of the ever-repeated hand gestures (*mudrā*), as in the Buddha statues, specifically the *abhayamudrā*, "which grants the absence of fear" (Saunders, 1960, p. 55). It seems that its direct lineage is not known. The position of the hand with closed fingers hints at a Sumerian-Babylonian ancestry. Just as in a cylinder seal from the third millennium, in the *abhayamudrā* the fingers are pressed closely together and point directly upward. In the Buddha statues the hand is held in a consciously stylized position, bent up at right angles from the wrist, in strong contrast to the wildly widespread fingers of Scandinavian or Alpine gods and demons.



67. PICASSO: *Mural in entrance hall of the Unesco Building*, *Paris, 1958*

68. MESOPOTAMIA, *third millennium: Deities and left-hand symbol on cylinder seal*

In the Buddha statues we have no longer to search for the meaning of the gesture. Here the doctrine states that the upstretched right hand of the Buddha gives confidence, fearlessness, and tranquillity. Thus it is not, as with the Egyptian *ka*, a direct transmission of a definite spiritual substance through intimate embrace. It is the anonymous radiation of divine protection to anonymous believers. Despite such differences, the Buddha gesture, the *ka,* and prehistoric gestures all signify the transmission of spiritual strength.



69. LE CORBUSIER: *Sketch for monument, "The Open Hand," 50 feet high, for Chandigarh, capital of the East Punjab, India*

THE SYMBOL OF THE HAND TODAY

"Ah, ces MAINS! Ces silhouettes de mains qui se posèrent en pochoir, grandes ouvertes sur fond rouge. Allez-y, je vous promets la plus forte secousse de votre vie! L'Homme de Toujours vous attend." So wrote the painter Ozenfant (p. 6), an early companion of Le Corbusier, in the foreword of his book, *Art*, after a visit in 1927 to the then newly discovered cavern of Pech-Merle. There he had found, as he put it, the "Ariadne's thread" for his book: "Le point de vue de l'éternité. . . . La question des constantes. . . . "

It is not difficult to understand why again today the hand exercises a great fascination over us; interest in the significance of the fragment has once more come to the fore. The fragment, the detail, becomes unwittingly built up to form a whole, which, by reason of the symbolic character of the fragment, is more powerful and more immediate than any carefully elaborated representation of totality.

below

One of the most beautiful stained-glass windows in the series made by Fernand Léger depicting the Passion in the church of Audincourt (1950/51) represents the words of Pontius Pilate as he washed his hands before the multitude, saying: "I am innocent of the blood of this just person." Léger depicts merely the essentials: a basin and two large hands streaming with blood. Similarly, two dice between two huge hands represent the soldiers casting lots for Christ's garment.

left

Le Corbusier chose as the dominating monument of Chandigarh, newly founded capital of the East Punjab, India, a gigantic hand mounted upon a tall wooden shaft: a great hand, covered with metal sheeting, standing fifty feet high, slowly turning with the wind. Its place was to be between the High Court of Justice and the Governor's Palace: in front of it the capital city, behind it the Himalayas.

70. FERNAND LÉGER: *Cartoon for stained-glass window in the church at Audincourt, France, 1950–51*

In Le Corbusier's final design, three fingers pressed together point upward to the sky dominating this vast expanse. The thumb and little finger are strained apart. Linking the outstretched thumb and little finger is a curve, formed like a saddle pass between mountain peaks. Le Corbusier himself named this monument *The Open Hand:* "the open hand for giving, the open hand for receiving, ought to be chosen as a symbolic manifestation," he has said.

The early Babylonian seal depicted a gigantic hand, probably erected in a temple court. This was a left hand. But since Roman times, the left hand has been regarded as baleful ("sinister") and the right hand has been dominant. In keeping with this tradition, Le Corbusier — the Western architect — naturally chose a right hand. Among the many sketches he made for this monument, only one (reproduced here) showed a left hand.

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In form, however, the hand has now become abstract. Looking back into prehistory, one senses the slumbering possibilities latent in the enigmatic signs from Santián. Can we here recognize a sudden flaring up of primordial symbolism, quite unknown to Le Corbusier? Can it be evidence of the urge to restore the symbol to its rightful place in our lives? Probably neither completely one nor the other, but a blend of both.

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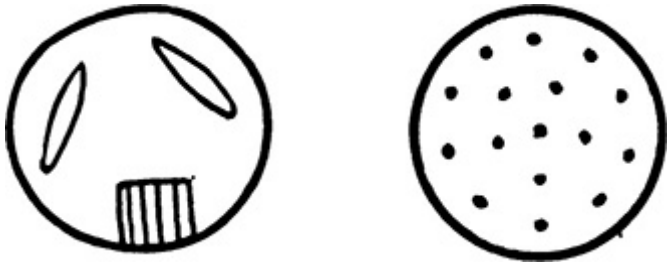
Picasso too has been intrigued by the gestures of hand and arm. This can be traced right through his work, but perhaps most strikingly in the vast mural (1958) designed for the entrance hall of the Unesco Building in Paris. In the most pronounced figure, the trunk has become reduced to a small circle: four limbs radiate from this central point, the two arms having widespread fingers. Everything has been reduced to these invocating limbs, even though they may have a meaning totally different from those of the Magdalenian *pêche miraculeuse.* It seems undeniable that the great painters of our time are compelled again and again to use primeval images to express the nameless symbols they have evoked for ideas beyond the power of naturalism.

MANIFOLD MEANINGS OF CIRCULAR FORMS

The circle is the first perfectly regular form to appear in primeval art; it is also the longest lived. The disk of the sun, the awakener and preserver of life, is most likely the origin of the red circle. Even so, one must be careful not to attach too specific a meaning to this. The manner in which the circle is combined with other configurations may give prominence to one meaning or another.

In the *Gestalt* of the circle, the sun and fertility become one. If we turn to the Egyptian hieroglyphs, which sometimes preserve prehistoric significance, we find that they indicate this fusion of the sun and fertility.



71. Hieroglyphs: threshing floor, wheat grains

One hieroglyph shows a disk containing two grains of wheat, and, on its rim, an abstract hand, which seems to be reaching for the grains. In another hieroglyph a circular threshing floor is covered with grain. Here, the circular form appears as a symbol of fertility in agriculture. This may be the outcome of a long tradition, which has passed through a transformation process similar to the changes in the Near East from the Venus figurines of the Aurignacian-Perigordian period to the fertility idols of the chalcolithic age: a transition from the fertility idol of the hunter to the fertility idol of the farmer.

The total significance of circular forms cannot be confined within the bounds of exact definition. Much depends on how they stand in relation to other forms with which they may appear. In addition, there is an astonishing multiplicity of different kinds of circular forms in primeval times:

1. *Stone balls:* Carefully worked stone balls, mostly made of limestone, appear in Mousterian strata. For a long time they were believed to be analogous to the South American Indian bolas, which are fastened to the end of a rope and **127** operated rather like a lasso. This interpretation never appeared entirely satisfactory, and recent excavations in Africa seem to point to a more likely meaning for them.

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2. *Cupules* (*hollows*): The first symbols to appear in the Mousterian period were artificially formed cup-shaped hollows in the stone. Their dimensions later varied very greatly, as did also their combination with other forms. These hollows, or cupules, were particularly numerous in the Aurignacian-Perigordian period, but grew less and less common in Magdalenian times, though they never entirely disappeared. They still exist among primitive people today.

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3. *Perforations:* Since Aurignacian times, a fondness became apparent for making perforations in small objects (such as the pierced staves, or *bâtons de commandement*) as well as in the rock face itself. These were by no means simple cylindrical holes. In section, each of these perforations appears like two cupules whose separating wall has been broken through.

(a) *Artificial rings:* In many of the Aurignacian and early Magdalenian rock shelters, artificially made rings, about two centimeters in diameter, have been found in the rock face. This form also occurs in megalithic times.

(b) *Perforated circular slabs:* The significance of perforated round flat stones of various sizes which have been found in Aurignacian-Perigordian strata is somewhat in dispute. But the use of similar stones in neolithic times in northern Europe and especially of the circular stone altars in the Aegean area perhaps gives a hint of their original ritual function.

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(c) *Pierced staves (bâtons de commandement*): The most frequent type of perforation occurs in numerous objects of *art mobilier*, and, above all, in the pierced staves usually made from branching reindeer antlers. The most varied meanings have been attributed to these objects, some of which will be described later. But —at least in the examples shown here — they were ritual implements which first appeared in the Aurignacian period and which rose to an artistic height in Magdalenian times. As a rule the perforation is placed at the junction of two short branches of the antler, with a third longer shaft.

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4. *Colored spots* (*ponctuations) or disks:* Red-colored spots appear throughout primeval art. Like the cupules they vary greatly in size, from dots of a centimeter to disks of ten centimeters and more. They are usually found surrounding hands, breasts, or animals. Much less often they stand alone, either in rows or building up their own configurations.

In conclusion: In primeval art the circle in all its various guises — balls, hollows, perforations, spots — exerted an extraordinary fascination. Its meaning was manifold, but was always related to the external human desire for procreation, for fertility. Its

form may well have been inspired by the sun, upon which all life depended. The shape of that celestial body became the symbol of life itself. The circle, which Plato deemed the most perfect of all forms, exerted its magic sway even in primeval times.

STONE BALLS OF THE MOUSTERIAN PERIOD

A few red dots of paint and the cupules of La Ferrassie are the only evidences we have of the use of symbols in the age-long Mousterian period.

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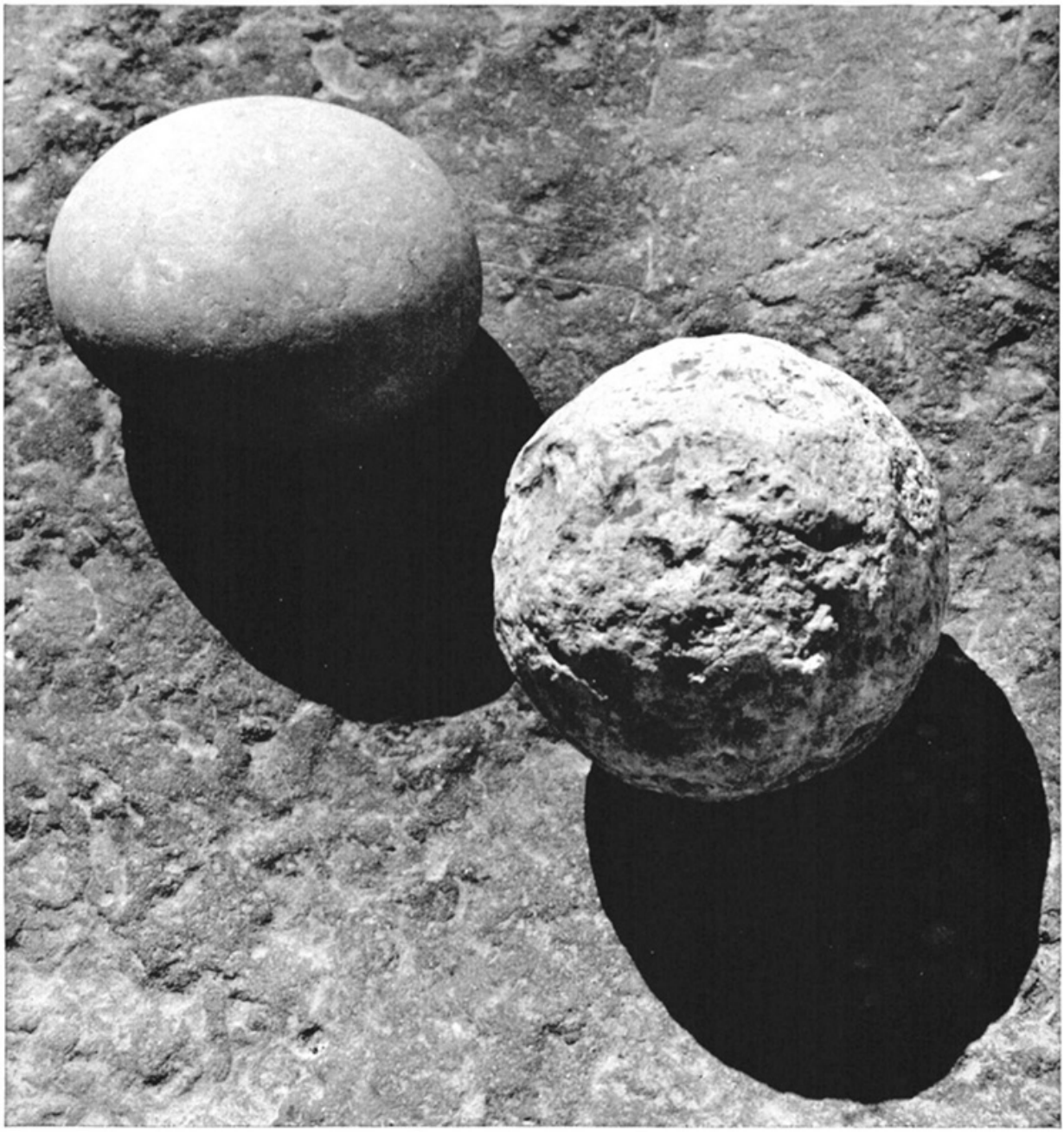
This lends great mystery to the stone balls which are found so remarkably often in the Mousterian strata: seventy-six alone in the Abri de La Quina (Charente). Normally these are about the size of a tennis ball or a medium-sized orange; but by no means always. At La Quina their dimensions vary from two to nine centimeters, in another deposit found in eastern Africa from four to eighteen. They are made predominantly from limestone, but sandstone, quartz, and silex balls also occur.

Their existence has long been known. Jacques Boucher de Perthes, a pioneer of prehistory, noted their presence in the deposits of the Somme in 1847 (1849, pp. 340, 343). Boucher de Perthes believed them to be symbols: some of them, he pointed out, were too carefully made to be intended merely as missile stones (*pierres de jet*). They also came to the attention of Édouard Lartet, another founder of prehistoric studies. He published illustrations of them (1861, pl. X, fig. 4; cf. Chauvet, 1907, pp. 190 ff.).

What is the meaning of these balls, made with such careful workmanship during a period which produced fine tools, though by no means so refined as those of later periods? From 1872, Chauvet persistently posed the problem of their meaning (pp. 189–202). What are they? Missiles? Balls made for games? Balls which, when heated, were used to produce hot water? All these theories have been weighed, but the following was put forward most persistently. In 1882, at the eleventh congress of the Association Française pour l'Avancement des Sciences, it was suggested that these stone balls *enveloppées de peau* (covered with leather) served as bolas, analogous to those used by present-day Patagonians (de Chasteignier, 1883, p. 605). To consider them "prehistoric lassos," a term actually employed in 1883 in the *Bulletin de la Société d'anthropologie de Paris* (Chauvet, 1883, p. 390), seemed to be the simplest and most convenient solution. Because these balls were found lying grouped together — by chance? —in various places in Europe, including La Quina, and recently also in Kenya (Africa), this hypothesis of the eighties, supported moreover by G. de Mortillet, is still alive today (1907, p. 200). Nevertheless, it is not surprising that Henri Martin, the excavator of La Quina, urged caution at the third Prehistoric Congress (1907), warning that he would put faith in the "bola theory" only in the event "a spherical object" were found both "in the quaternary level and among the Patagonians . . ." (1907, p. 197).

Since then, stone balls have been excavated in southern Patagonia which, according to carbon-14 tests, go back to 8000–6000 B.C., i.e., much later than the European stone balls of the Mousterian period. Commonly, bolas have grooves for the attachment of ropes, but these Patagonian balls have none (Bird, 1946, pp. 17–24).

This basically unsupported explanation is now being shaken: to know the reason, let us make a detour to Africa. J. Desmond Clark (Northern Rhodesia), at the second Panafrican Prehistoric Congress, set out "to review and weigh the probability of the use or uses to which the stones may have been put" (1952, p. 403). From his report we learn that "the perfect artificial sphere first makes its appearance with the late Chelles-Acheul in South Africa" (p. 410), thus dating back even earlier than the Mousterian period. Clark said that he "purposely refrained from using the word bolas" in connection with the stone balls, and he concludes that these stones were parts of hunting weapons. "The last possibility is one which has also a modern or near modern parallel. This is the stone-headed club to which attention has recently been drawn by Lagercrantz [1950, p. 165]. . . . It is used as a weapon of defense and is also thrown at game" (Clark, p. 415).



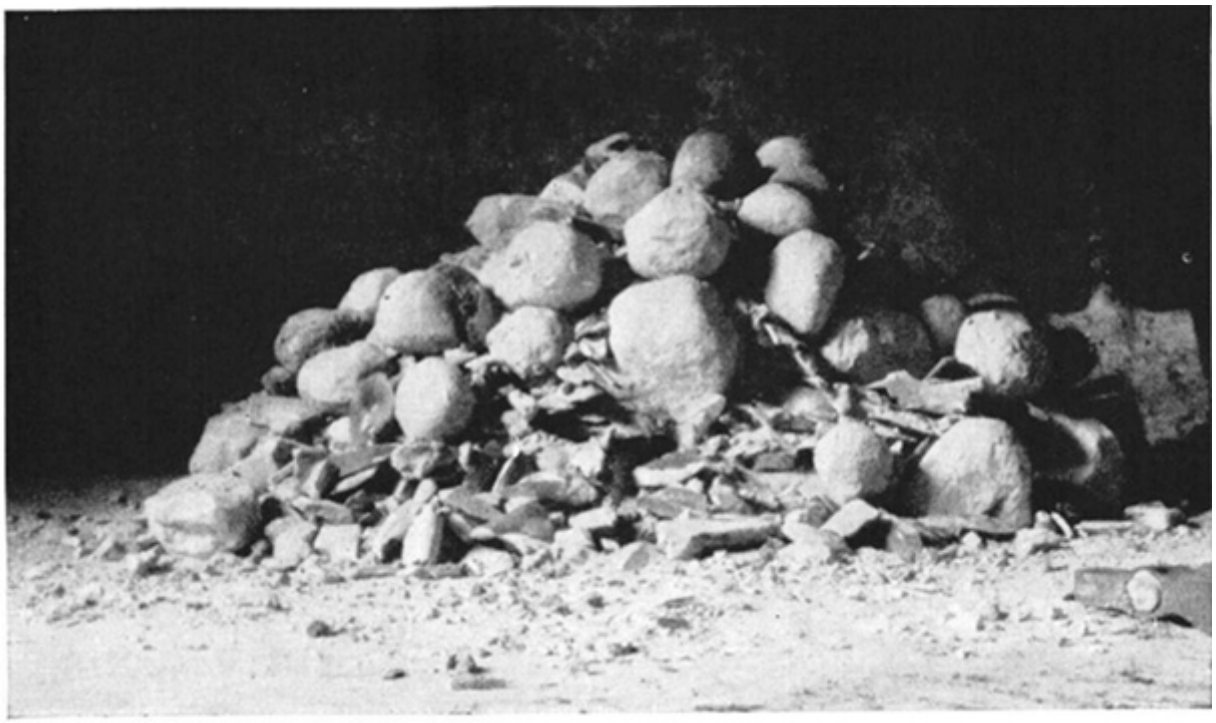
72. LA QUINA (*Charente*): *Limestone ball and hammer-stone* (*persecuteur) of quartz*

The bola theory seems rather far-fetched, but the use of these balls as parts of clubs appears much more probable. Clark gives illustrations of African weapons of this kind which show a stone ball mounted on a slender stick. Even more important, such a club has a sure and ancient tradition. Wooden clubs with rounded heads and also throwing-stones, grooved around the circumference for the attachment of a string, occur in the European neolithic period (e.g., at Robenhausen, near Zurich). These stones are more or less melon-shaped.

It can be no coincidence, but an indication of an ancient African tradition, that a club with a rounded, pear-shaped head became the mace or symbolic weapon of the Egyptian kings. On the famous cosmetic palette of King Narmer from the First Dynasty, the king

grasps the middle of this short club. With upraised arm he is in the act of bringing it down upon the head of a kneeling foe. This form of representing a victorious Pharaoh, with uplifted club in his right hand, persisted until the final decline of Egypt.

The maces which have come down to us from the First Dynasty were certainly not intended for use. The Ashmolean Museum possesses a fragment of a pear-shaped mace head of the Predynastic king "Scorpion," decorated with scenes in relief. This was a dedicatory gift found in the temple of Horus in Hierakon-polis, the early sanctuary of Upper Egypt. Numerous paintings and rock engravings of axes, double axes, and swords in the bronze and early iron ages (Ebert, 1924–32, VI, p. 334) show the frequency of this transformation of a weapon into a symbol, and thence into an offering.



73. EL GUETTAR (*Tunisia*): *Cairn of Mousterian spheroids*

A cairn of Mousterian stone balls

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Clark's discoveries in Africa permit the bola theory to be discarded even more definitely and at the same time give a possible explanation of the early use of the stone ball in Europe. At this same Panafrican Congress a young prehistorian, M. Gruet (1952, pp. 449–56), gave a report on a find in Tunisia. In 1951, near the village of El Guettar, close to a now sealed artesian well, he discovered a cairn about 75 centimeters high and 1.50 meters in diameter, made up of about sixty stone balls. "Several balls of flint were placed right at the top. All the other balls were of limestone. . . . The stones at the base were much larger and only very roughly spherical: they formed a *circle"* (p. 457; my italics). The diameter of the balls varied from four to eighteen centimeters. Among

numerous flints in the interior of the cairn were found bones and teeth and even a stone triangle.

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This cairn was situated in an undoubtedly Mousterian level more than six meters below ground. Since it had been surrounded with sand it proved possible to excavate it intact. In La Quina, seventy-six limestone balls (*sphéroides de calcaire*) were found. "The diameters varied from 2.3 cm. to 9 cm." (Martin, 1908, p. 208). All this goes to show that neither the bola theory nor even the club theory was valid for the Mousterian period, as stone balls of such small diameter could be of no use for either purpose.

The stone balls of La Quina were not surrounded by a gentle protective layer of sand, which could have preserved their original arrangement. In addition, the excavation methods of that period were not so well developed as those of today. What is common to the two finds is the great number and the varying size of the balls, as well as their concentration in a heap at one spot.

A multiplicity of meanings is at the heart of primeval symbolism. Exact interpretation and precise labeling are seldom possible. It can well be that the cairn at El Guettar was erected, as Gruet assumes, in connection with the artesian well, without need to consider a local god, a conception for which the Mousterian period is, in any case, too early. The altarlike arrangement of the balls cannot, however, be denied.

It is a universal custom to erect cairns to mark certain important places such as graves or mountain passes. Here, however, we are concerned with a definite form and a definite intent. Among other objects, a triangular tablet of hewn stone was found. Gruet urges caution, but all the same he realizes himself that this isosceles triangle of stone resembles the *triangles sexuels* (1952, p. 456).

The systematically piled-up spheroids seem to us to constitute an altar constructed of offerings which, like the Aurignacian-Perigordian cupules and hands, plead for the fulfillment of a deeply felt desire.

In his thoroughly documented essay, Gruet refers to the custom of the "Berbers of North Africa, to erect cairns of stone balls the size of a fist near to the tombs of saintly men or other holy places (*Mzaïr*, sing. *Mzara*) to bring about the realization of their prayers" (p. 456). The situation of a cairn of offerings close to an artesian well provides, as Gruet emphasizes, a new insight into the mentality of the Mousterian period. In this context it is, however, especially significant, for the Mousterian stone balls represent the only skillfully constructed regular form of that period, and they must therefore have had a ritual purpose. Magical conceptions must lie behind their creation. So, after the lapse of a century, we once again approach the interpretation sensed by Boucher de Perthes at the outset.

CUPULES

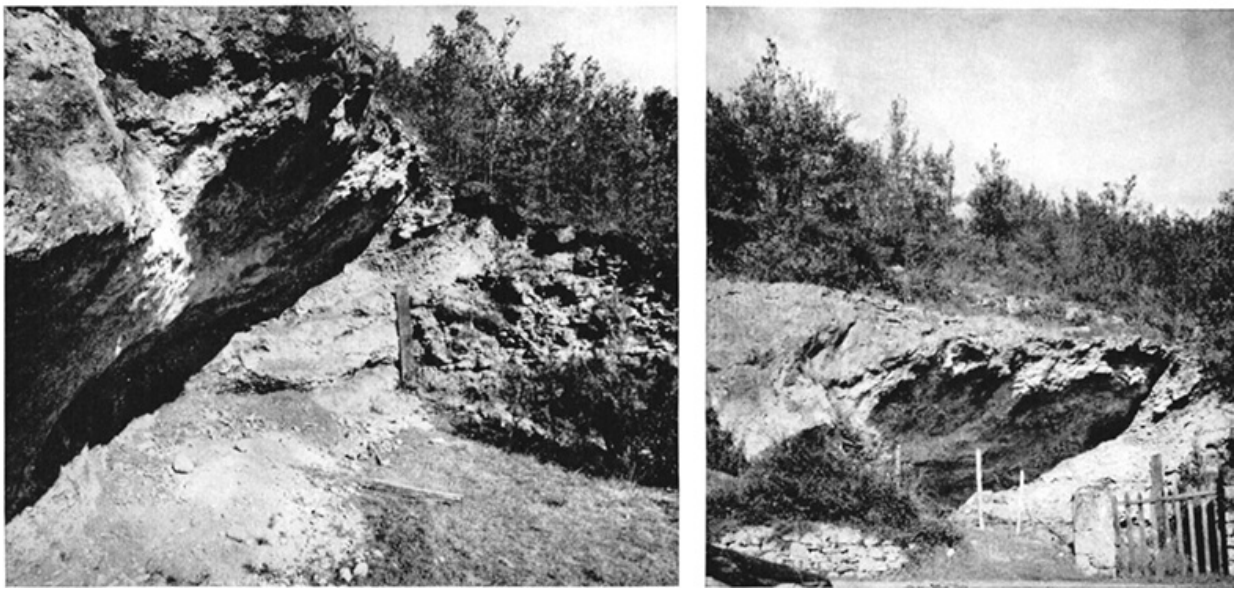
The cupules of La Ferrassie

below and right

La Ferrassie is a rock shelter about three miles from Les Eyzies. It is astonishing how much insight Denis Peyrony, its patient excavator over thirty years, was able to obtain from his study of this modest dwelling place into the way of life both of the Mousterian and Aurignacian eras. Peyrony and his colleague, L. Capitan, uncovered no spectacular trophies, which is probably why their finds have not been transplanted from the little museum at Les Eyzies to that great warehouse of prehistory, the Musée des Antiquités Nationales, at St-Germain-en-Laye, near Paris.

From La Ferrassie and a few other rock shelters near Les Eyzies, we are able to gain a glimpse into the habitat of Mousterian man, which — judging from the fauna and coarse flints found (Peyrony, 1934, p. 10)—probably extended back into the warm period before the last ice age. As a result of very careful excavations, it has been possible to reconstruct the living habits of Neanderthal man and also his relations with the dead.

This in itself is of great interest, but what is remarkable is the number and variety of objects found within the bounds of a few square meters. The rock shelter of La Ferrassie is inconspicuous in comparison with others such as Laugerie Basse and Laugerie Haute near Les Eyzies. But La Ferrassie is not yet exhausted. Even today the eye can discern numbers of worked flints projecting from the sliced-off strata. A small cavern, above the shelter to the left, yielded nothing of note. The selection of the site, now adjacent to the highway leading to Le Bugue, is consistent with that of other prehistoric dwelling places of the Dordogne. Immediately beside it is a small sheltered dell (*vallon*) containing a spring.



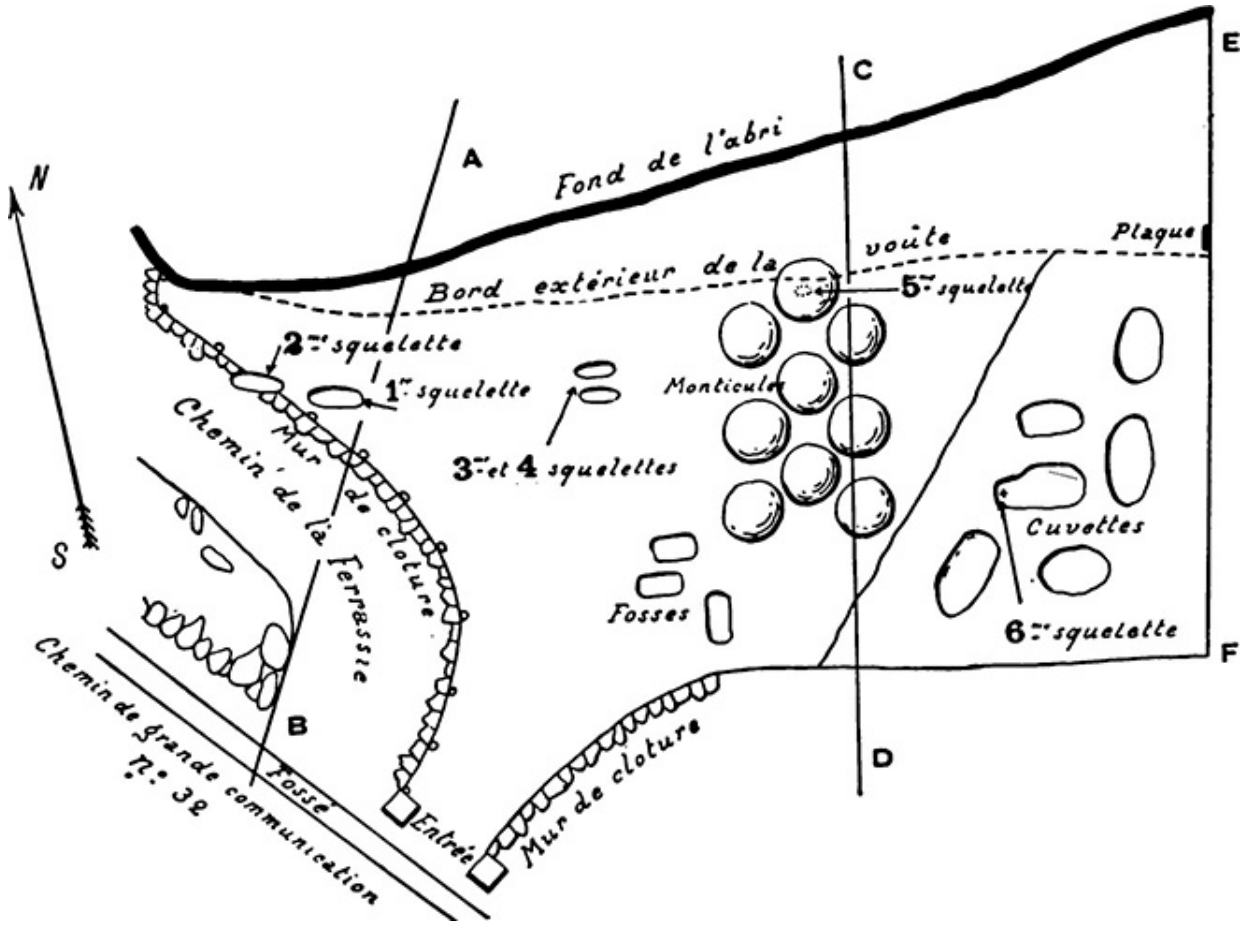
74. LA FERRASSIE (*Dordogne*): *Two views of the rock shelter*

The shelter was formed by leaning the walls against the great overhanging crag. As usual, the walls were made of daub and wattles, secured at the base by stones.

There was stone paving, about fifteen meters square; the slabs were "placed carefully beside one another" to make a "surface which was more or less even" (p. 36).

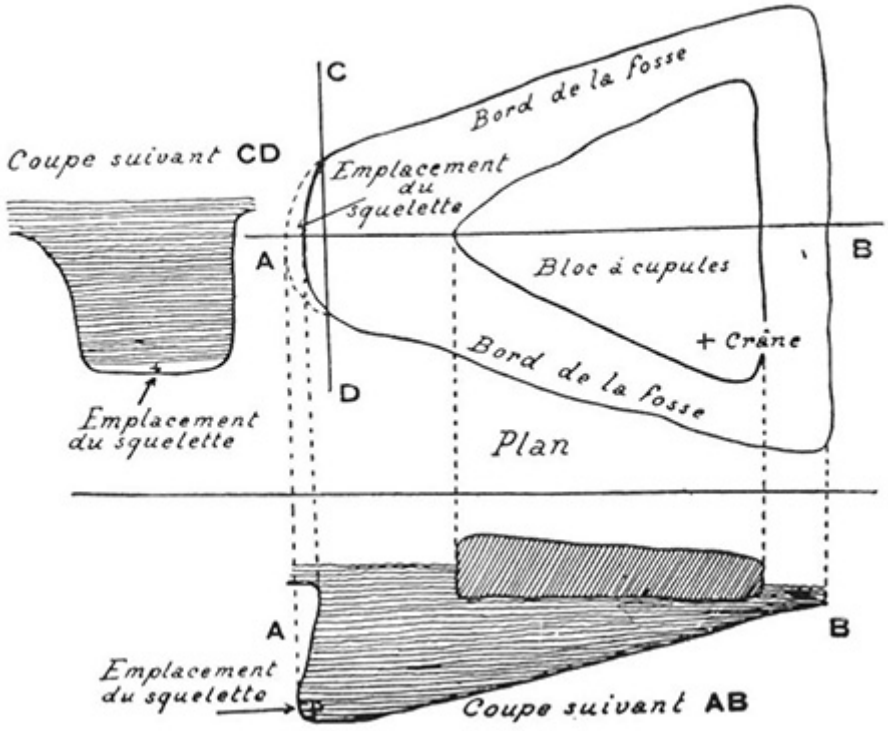
During the excavation six skeletons were discovered: two of adults, four of children. Living area and burial place were together. The dead played a part in the fate of the living.

Under these conditions of companionship arose the first signs of symbolic expression. These appeared when the sixth skeleton was exhumed. This was the remains of a small child, laid in an east-west orientation, the feet to the west. The limbs were drawn close to the body; the head separated from it. Only the skull was found, with neither teeth nor jawbone. "It was evident that the skull had been mutilated, perhaps to extract the brains, perhaps to serve as a ritual vessel" (p. 36). These signs already give evidence of a far from simple ritual.

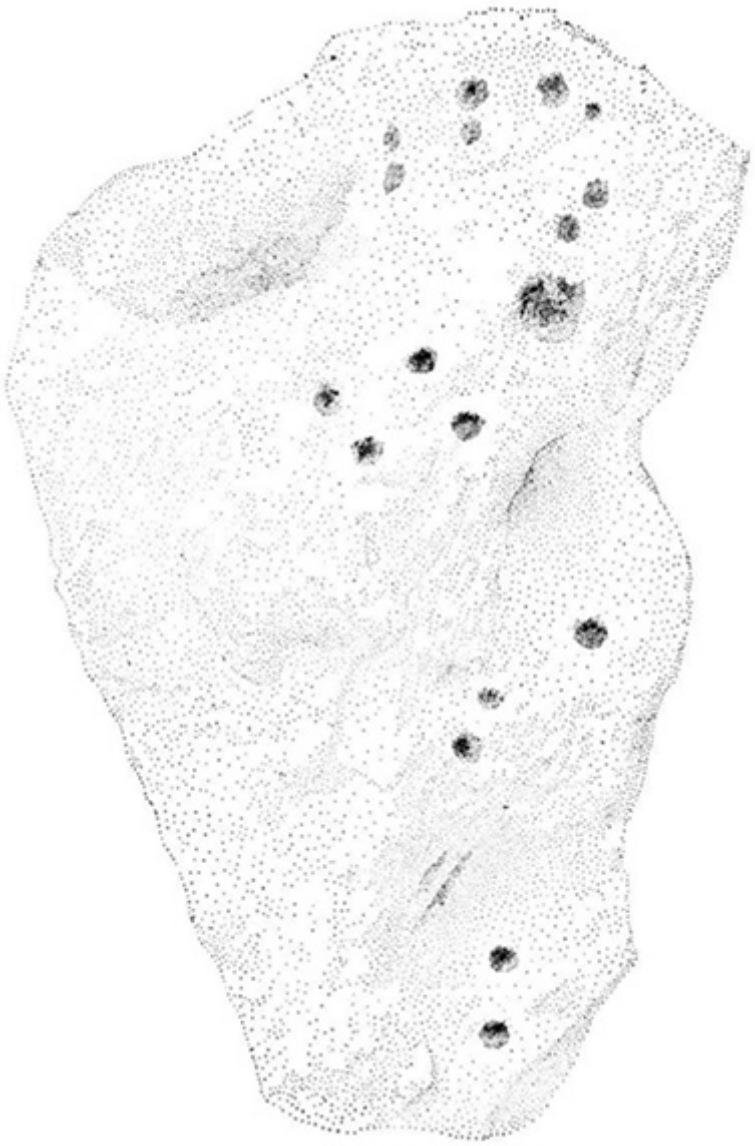


75. LA FERRASSIE: *Plan of rock shelter, by D. Peyrony*

76. CHIMANE INDIANS (*Bolivia*): *Sanctuary*, *with cupules representing eyes*, *mouths*, *breasts*, *and vulva*



77. LA FERRASSIE: *Plan and section of triangular tombstone*, *by D. Peyrony*



Drawing for fig. 78

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There were also other signs. The cavity within whose deepest and narrowest point the tiny skeleton lay had "the general shape of an egg" (1.20 x 0.40 m.), and "a limestone block, triangular in form, more or less equilateral, the sides about 0.80 and 0.15 m. thick," covered the opening (p. 33).

Here is Peyrony's account of finding the first of these man-made cupules: "We lifted it and turned it over. On the lower face, in an angle of the smoothed surface, we noticed a small cupule associated with a series of other cupules. At first we thought these hollows were natural markings. But, after careful examination, we observed differences from such natural markings which enabled us to confirm their artificial origin: their regularity and, above all, their placing in pairs convinced us that they must be the result of human endeavor.

"From minute observation of this stone it appears that, since a period of the Mousterian era, men have formed circular indentations in stone exactly the same as those we find later in the Aurignacian period and later still in paleolithic and neolithic sites. These hollows, both from their form and still more from their placing, appear to have the character of a sign, perhaps a symbol, perhaps even a ritual function. The inverted position of the block over the pit appeared to have been intentional on the part of those who made the grave. Whatever the interpretation given, we are here in the presence of something completely new: evidence of graphic expression in the Mousterian era, whereas up till now we had thought its oldest manifestations were in the Aurignacian era" (p. 34).

These artificially hollowed-out indentations in stone are the first of all the circular cavities found in so many civilizations. With them the symbol finds its first objective expression.

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The Abbé Lemozi goes even further. He believes the occasionally paired cupules to indicate nurturing breasts, and refers to the way children depict breasts by pressing two dents in a plastic surface. The use of a depressed form to signify a raised form is a natural and widespread means of expression. In the now neglected sanctuary of the Chimane Indians at the foot of the eastern Cordilleras of Bolivia, there are numerous boulders covered with representations of the female sex organs. Here "the characteristic representation of eyes, mouth, and breasts is by deep round holes" (Hissink, 1955, p. 62).

Even apart from this there are other indications: the almost egg-shaped grave pit; its almost triangular covering slab, with indented cupules. These are signs which, despite all uncertainty and precautions, point to a common intent: symbols of reproduction, of perpetuation.

Assuming that Peyrony's report is accurate, and it has never to our knowledge been doubted, the first symbol appeared long before the advent of *Homo sapiens*.

Cupules in the Aurignacian and Magdalenian periods

In the Aurignacian period one finds cupules everywhere: alone or in conjunction with other objects —animals, hands, vulva, phallus, and breasts.

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It was also in La Ferrassie that Peyrony believed he found the first traces of the spiral. In a middle Aurignacian stratum lay a stone with a smooth surface and a series of sixty cupules similar to those found in other places, such as the Abri Blanchard. At first (1921), Peyrony described the disposition of these cupules as "following along lines which are sometimes almost straight, sometimes sinuous" (1934, pp. 67, 68). Later he stated definitely that they followed the form of a spiral. It is certainly not a complete

spiral, but the tendency towards a spiral form, later fully developed on the Magdalenian bone engravings of southwest France — Arudy and Isturitz (Basses-Pyrénées), Lespugue (Haute-Garonne) —is well indicated (Saint-Périer, 1929; Graziosi, pls. 94, 95).

Large semispherical hollows also occur in the Aurignacian-Perigordian period as conspicuous symbols. They are usually unaccompanied by smaller cupules but are related to fertility symbols and to animals whose increase is desired.

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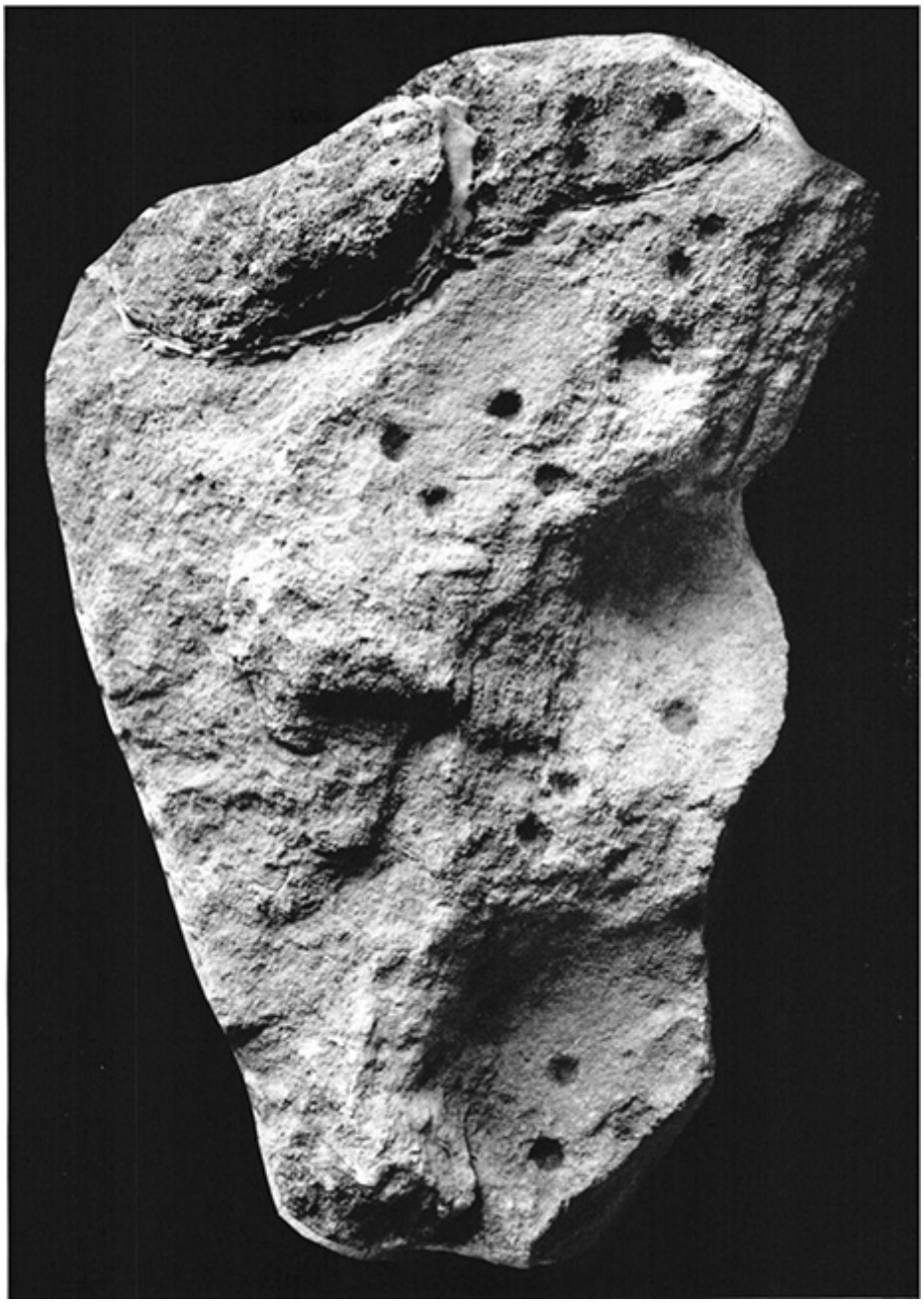
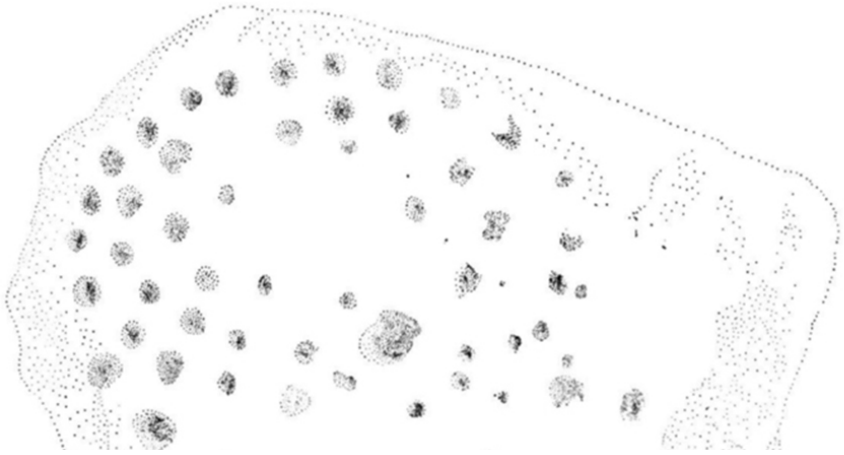
On the left of a broken block from the Abri Cellier (Sergeac, near Les Eyzies) a large cupule is hollowed out. It is placed in association with three balloon-shaped or roughly heart-shaped vulva symbols. The significance of the cupule as a fertility symbol is even more sharply emphasized when it is in intimate relation with an animal. The most prominent feature of a block from an early Magdalenian stratum (*Magdalénien ancien;* Laugerie Haute) is a large cavity, seven centimeters deep and twenty in diameter. Next to it is a horse with a clearly modeled neck, but with head and legs largely worn away. The intimate connection of cupule and animal is emphasized by the common contour shared by the back of the horse and the edge of the cupule. The French term such cases *épouser le contour:* uniting animal and cupule by a common outline. Something often sought for in the natural rock is here attained by a deliberate act: a similarity of form to the back of an animal, which can then be completed.

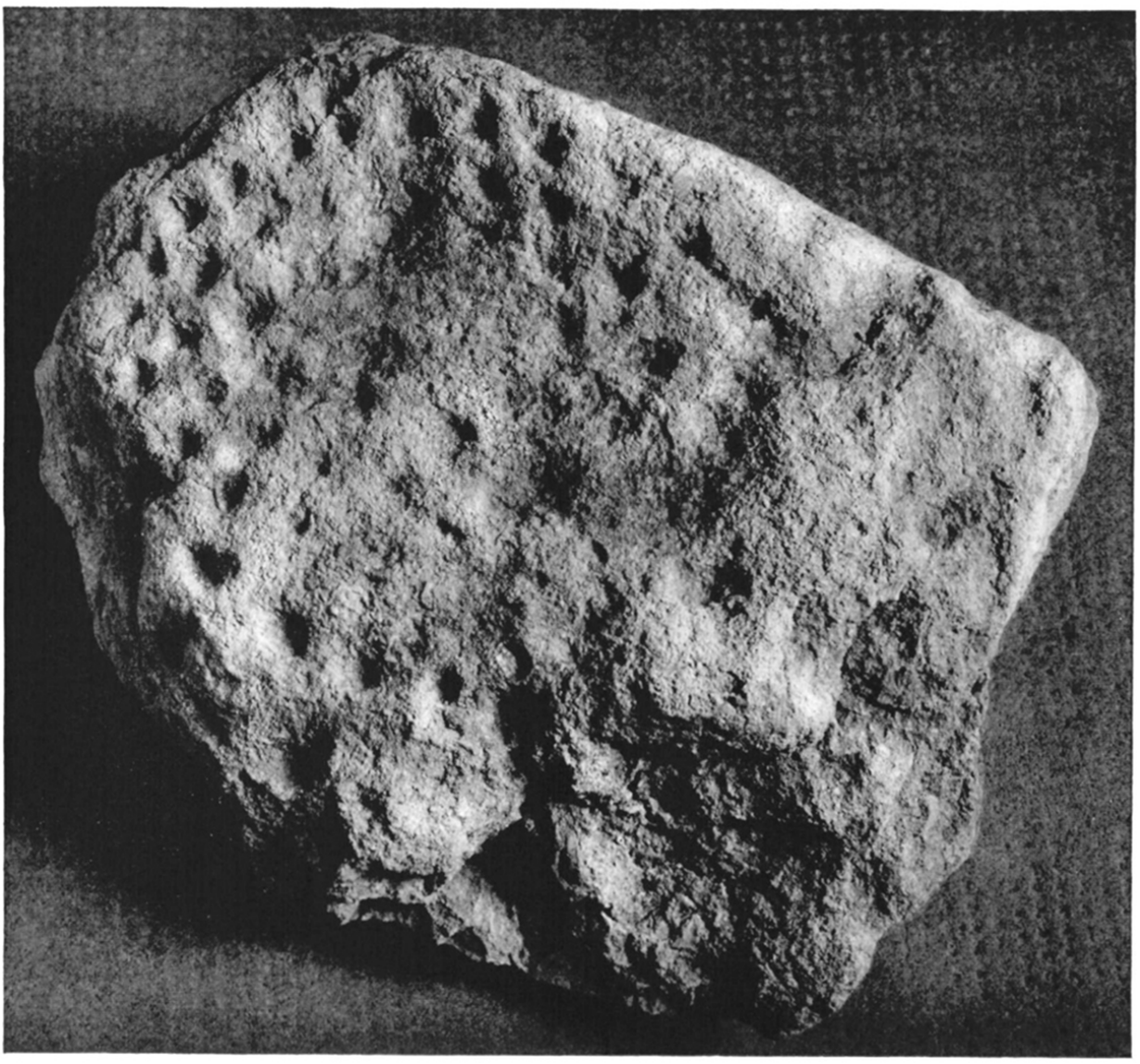
141

A predestined animal form was often seen in natural formations of rocks, which were given completion by the sculptor later. The same is true of small objects of *art mobilier:* animal heads were perceived in the tines of antlers and carved out accordingly, or even a small stone from a river bed yielded a *lusus naturae* of animal shape, with circles left by limpets regarded perhaps as fertility charms.

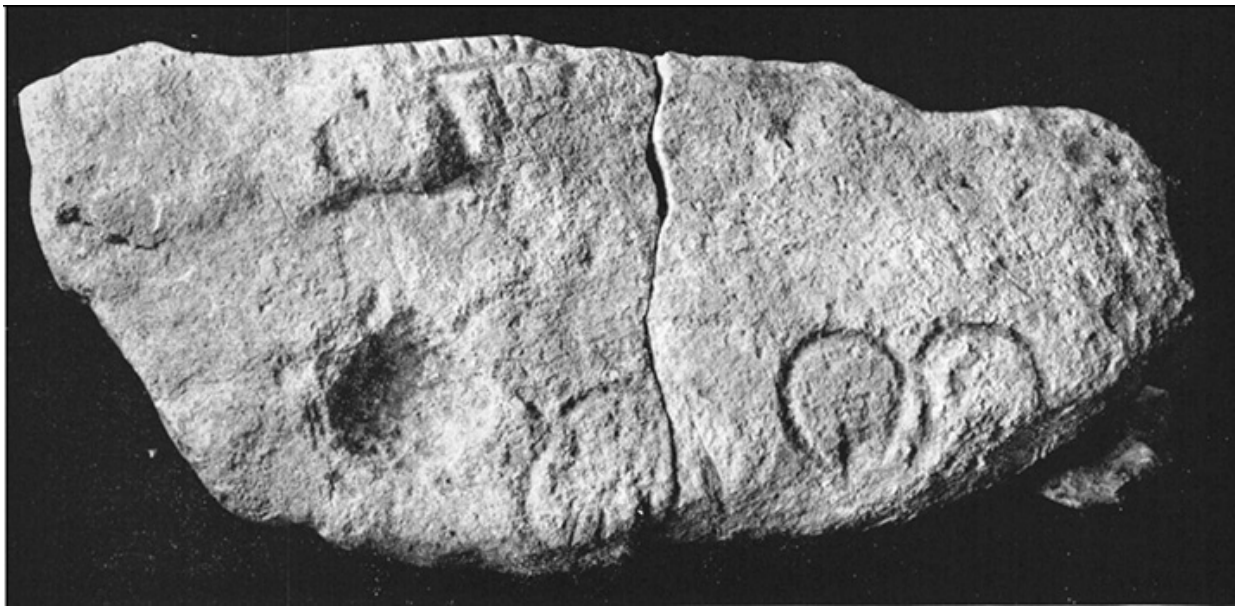


78. LA FERRASSIE: *Triangular tombstone, with the first man-made cupules; Mousterian* (*see drawing, p. 134*)





79. LA FERRASSIE: *Middle Aurignacian limestone block showing spiral cupules. With drawing*



80. ABRI CELLIER (*Dordogne*): *Aurignacian limestone block with large cupule and vulvas*

Further development of the cupules

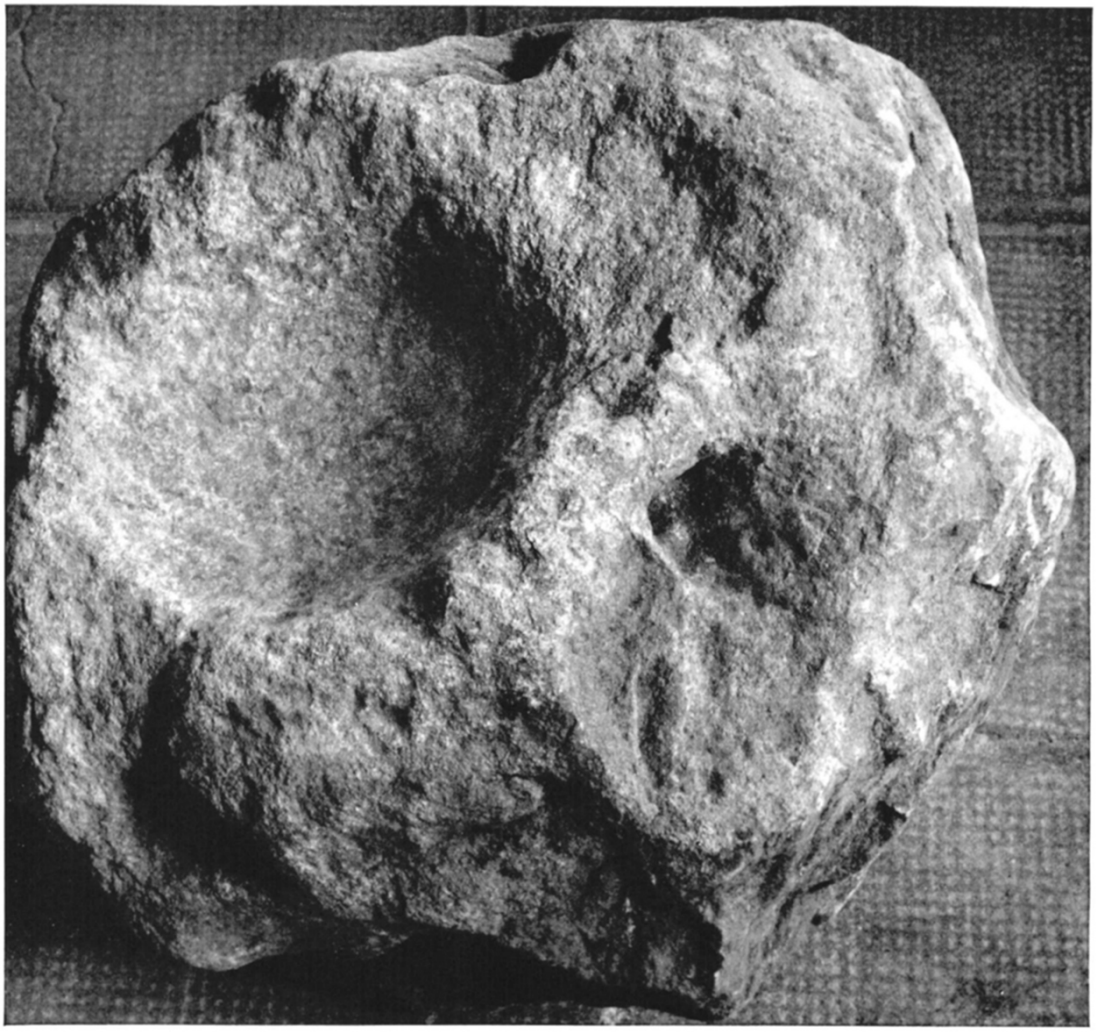
Cupules are found in primitive cultures throughout the world. Their meaning in specific cases and their possible relationships call for research which lies outside our scope.

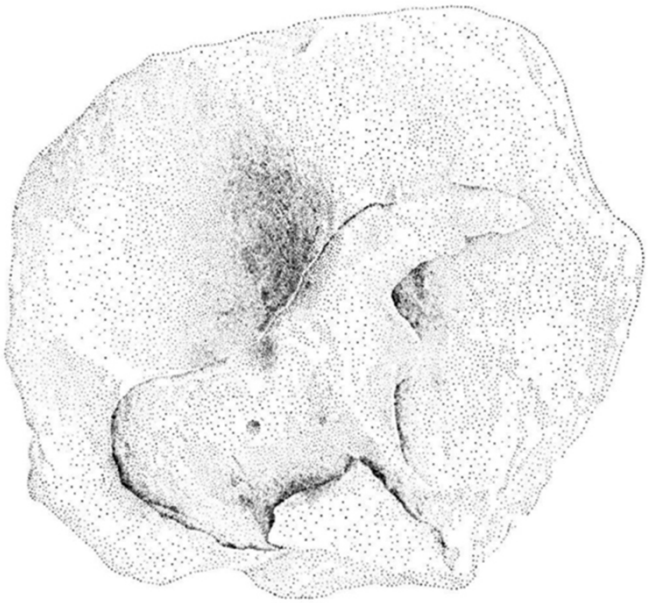
In the neolithic period: At the close of the stone age, cupules were widespread: in Scandinavia, in England, in Spain, in the French, Italian, and Swiss Alps. Erratic blocks, often of considerable size, covered with cupules and symbols, have been found everywhere: e.g., a fourteen-meter-long block with 91 cupules found in the neighborhood of Como, in northern Italy (Schaudel, 1909, p. 429). And 256 cupules, arranged in different groups, have been counted on another block found on the French side of Lake Geneva. Here a natural cavity caused by erosion was incorporated in both the design and the meaning of the whole.

145

Nor are cupules elsewhere found singly. Occasionally two or three are linked together by shorter or longer channels. At the bottom of large cupules there is sometimes a smaller additional cupule. Often gatherings of cupules like constellations are accompanied by artificial pediform depressions. Circular rings enclosing an inscribed cross or a cupule (Col du Torrent, Valais, Switzerland) recall similar representations in Scandinavia and Egypt.

The abundant range of expressive means at the disposal of Magdalenian man causes the cupule, in the course of millenniums, to assume an increasingly lapidary form, which, for that very reason, is more difficult to interpret. We are now in the age of full abstraction.



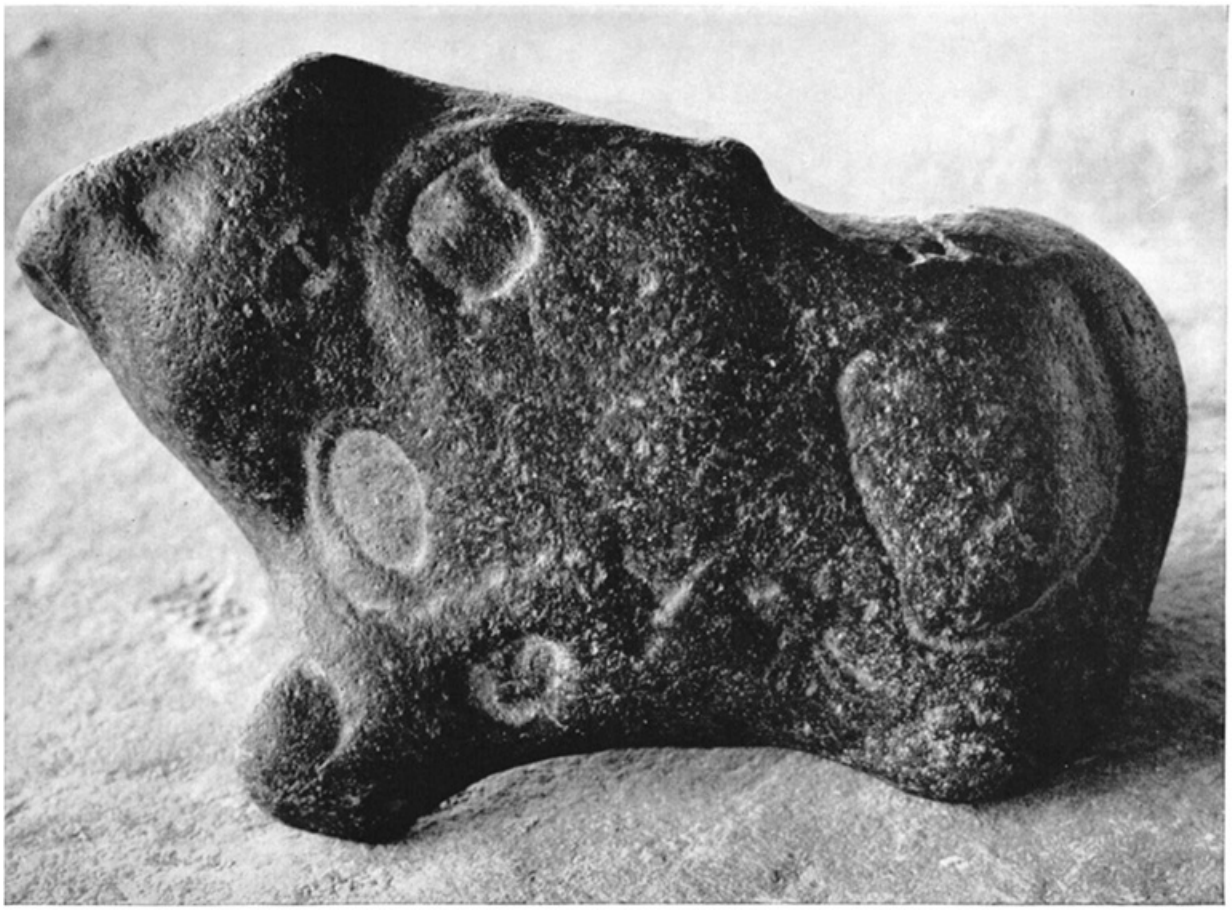


81. LAUGERIE HAUTE (*Dordogne*): *Boulder with early Magdalenian large cupule* (*20 cm.*) *and engraved horse. With drawing*

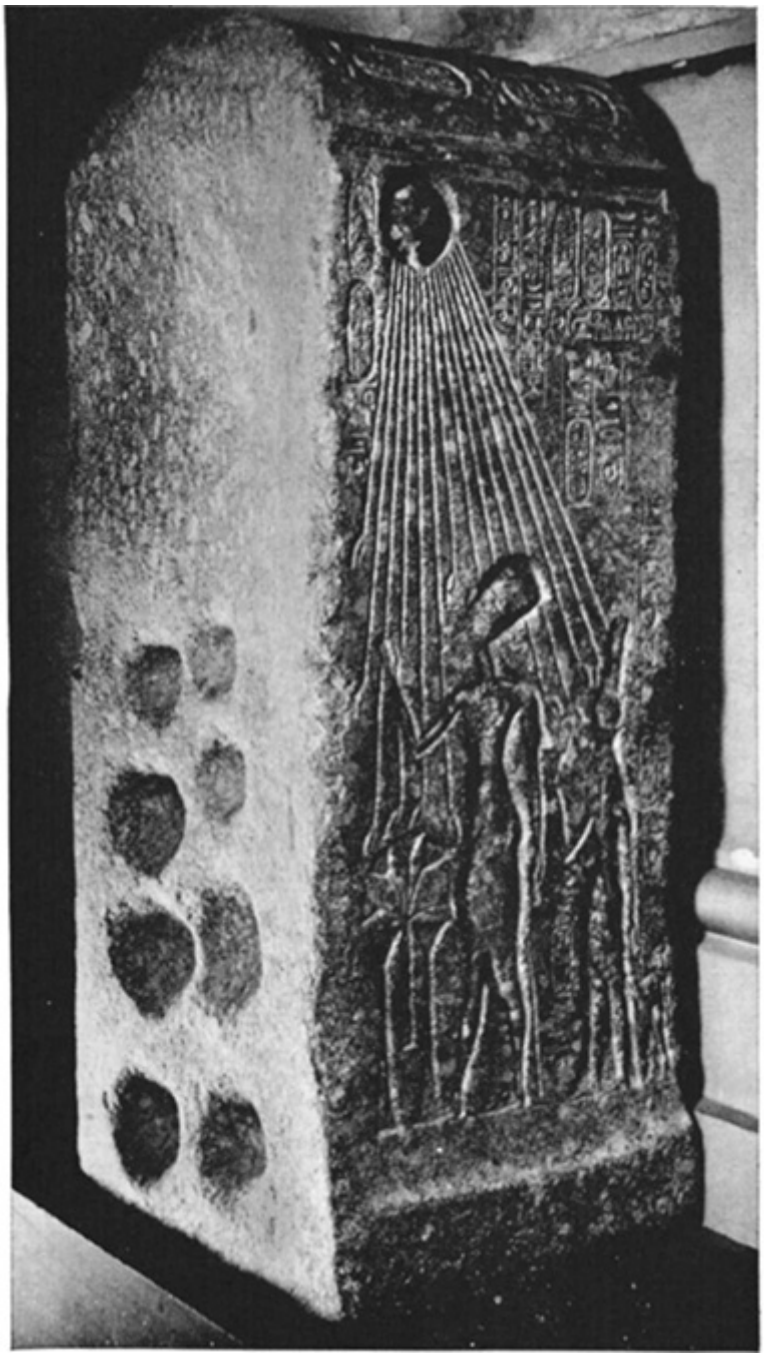
The stammering symbol of the cupule, the first to be conceived by man, however, continues throughout the ages and experiences a renaissance at the end of the paleolithic period.

142

In Egypt: For the symbolic use of cupules in historic times the way leads once again to Egypt. In the form of the circle, sun and fertility merge together. The hieroglyph for the sun is composed of a circle with a dot at its center. In ancient ceremonial hieroglyphic inscriptions, the symbol for the sun, or the sun-god, consists of a large cupule with an embedded sphere: in other words a double form made up of cupule and sphere, an extra emphasis corresponding to the life-bestowing, propagating force of the sun. These also appear in the New Kingdom engraved upon the obelisks in strongly accented sunken relief, e.g., a deeply engraved cupule and embedded sphere from the temple of Karnak. The hieroglyph for "son of Ra" is here composed of a cupule, signifying the disk of Ra, the sun-god, and a duck, signifying "son."



82. LES EYZIES (*Dordogne*): *Lusus naturae—stone from a river bed (72 mm.), perceived as an animal; the irregular circles probably made by limpets*



83. TELL EL AMARNA (*Egypt*): *Stele with irregular cupules on its broader side*

84. KARNAK (*Egypt*): *Emblem of the son of Ra with cupule (5 cm.) containing an embedded sphere*

left

A stele of King Akhenaten from Tell el Amarna (14th cent. B.C.) is quite differently engraved on two sides. On a visit to the Cairo Museum, my attention was arrested by the broad side of the stele, turned towards the wall, which displayed seven large cupules. I had this stele turned around and photographed. The primitive, hewn-out cupules, which then came to the front, were said to be a gaming board, unlikely as this might seem for a stele. These cupules are, however, on the original face of the stele, which is broader and has a rounded top. Akhenaten had the relief of himself and his family carved upon one of the narrow sides of the original stele. In this relief the life-giving rays of the sun spread out like a canopy over the whole royal family. Their source is the symbol of Aten, the sun, with which the revolutionary Akhenaten had

replaced the entire anthropomorphic pantheon of Egyptian deities. For this symbol he adopted the ancient hieroglyph: a cupule containing an embedded sphere.

Akhenaten, with his bent towards the simplification of religion, may have been attracted to this stele because of its seven large cupules. In the neolithic period, menhirs often had numerous cupules hollowed out upon their faces (Guénin, 1915, p. 207).

204

The direct relation between cupules and fertility is very clear upon one of the thirteen-foot statues of the god Min from Coptos (Ashmolean Museum, Oxford). As always, this god of procreation is ithyphallic. Large, deep cupules have been hollowed out along the whole length of his body. On close inspection these appear polished as if through frequent handling. Below them, near the point where it is broken off, another statue shows two abstract vulva symbols, front and back.

On the significance of late neolithic cupules

Already towards the middle of the last century, discussion arose concerning the meaning of the cupules which are found with such remarkable frequency on standing stones and rock walls of the neolithic, bronze, and iron ages. The great stone blocks with their cupules, especially when grouped, indicate centers of cult. Their setting is totally different from the mysterious solemnity of the chthonic caves. It seems that, where opportunity occurred, European man at this time climbed up towards the radiating light. The chthonic female darkness gave way to the male strength of the sun.

116, right

At a height of 2,000 to 2,500 meters, some twenty thousand rock engravings were found in the Monte Bego district of the Maritime Alps. Other engraved rocks and stones have been found high up in the Alpine valleys of northern Italy (Val Camonica) and, in fewer numbers, on the Swiss mountain passes of the Valais —on the Col du Torrent or high above Zermatt (Schenk, 1912, p. 105).

In 1864 a Swiss archaeologist, F. Troyon, had suggested that stone blocks with cupules "are obviously altars, the cupules on these blocks being intended to receive libations" (Vuarnet, 1908, p. 434). In certain places in Sweden (near Linde, Västmanland) a "pagan" custom still prevails: to cure a sick child, a doll intended to represent the child is held over a stone whose cupules have been filled with grease: an offering "to propitiate the elves, evil spirits, or protectors who watch over the health of the family" (p. 440).

The sacred stones of the late neolithic period, whatever their form —menhirs, engraved rocks, porthole stones —all emanate a magically mysterious attraction. Popular beliefs and legends stimulated by these stones still exist to some extent today.

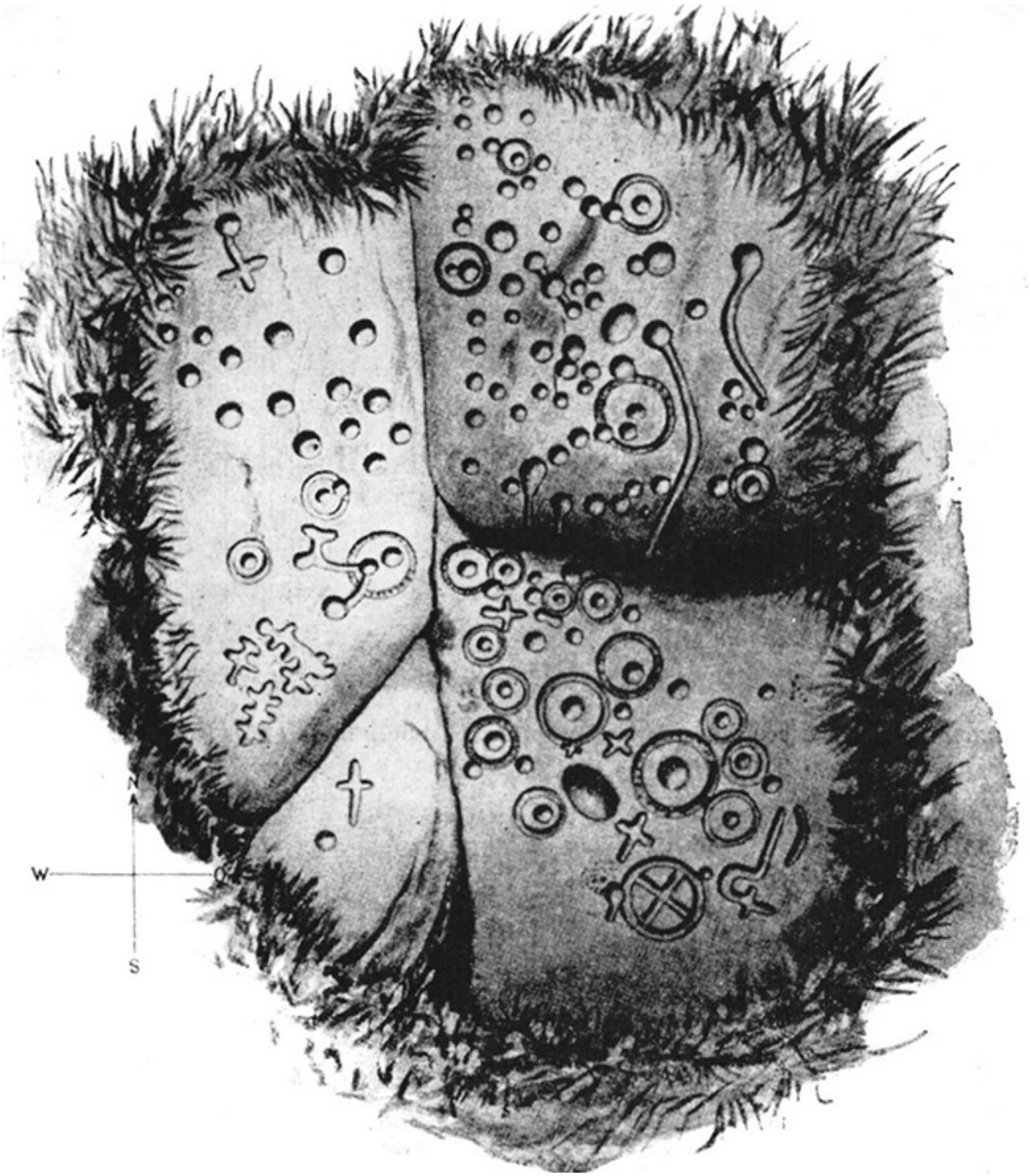
Little credence has been given to the hypothesis of a prehistorian from the Vendee, France, who saw in the arrangement of the neolithic cupules indications of the summer

and winter solstices (Baudouin, 1919, pp. 432, 434). In a menhir covered with cupules he saw a map of the stars; and finally, after decade-long persistence, he claimed to discern the record of constellations such as the Great Bear: "I have at last been able to discover indisputable material proofs that the CUPULES *do indeed represent* the HEAVENS and especially the STARS: . . . THE PROBLEM IS SOLVED, ne varietur" (1922, pp. 270–71).

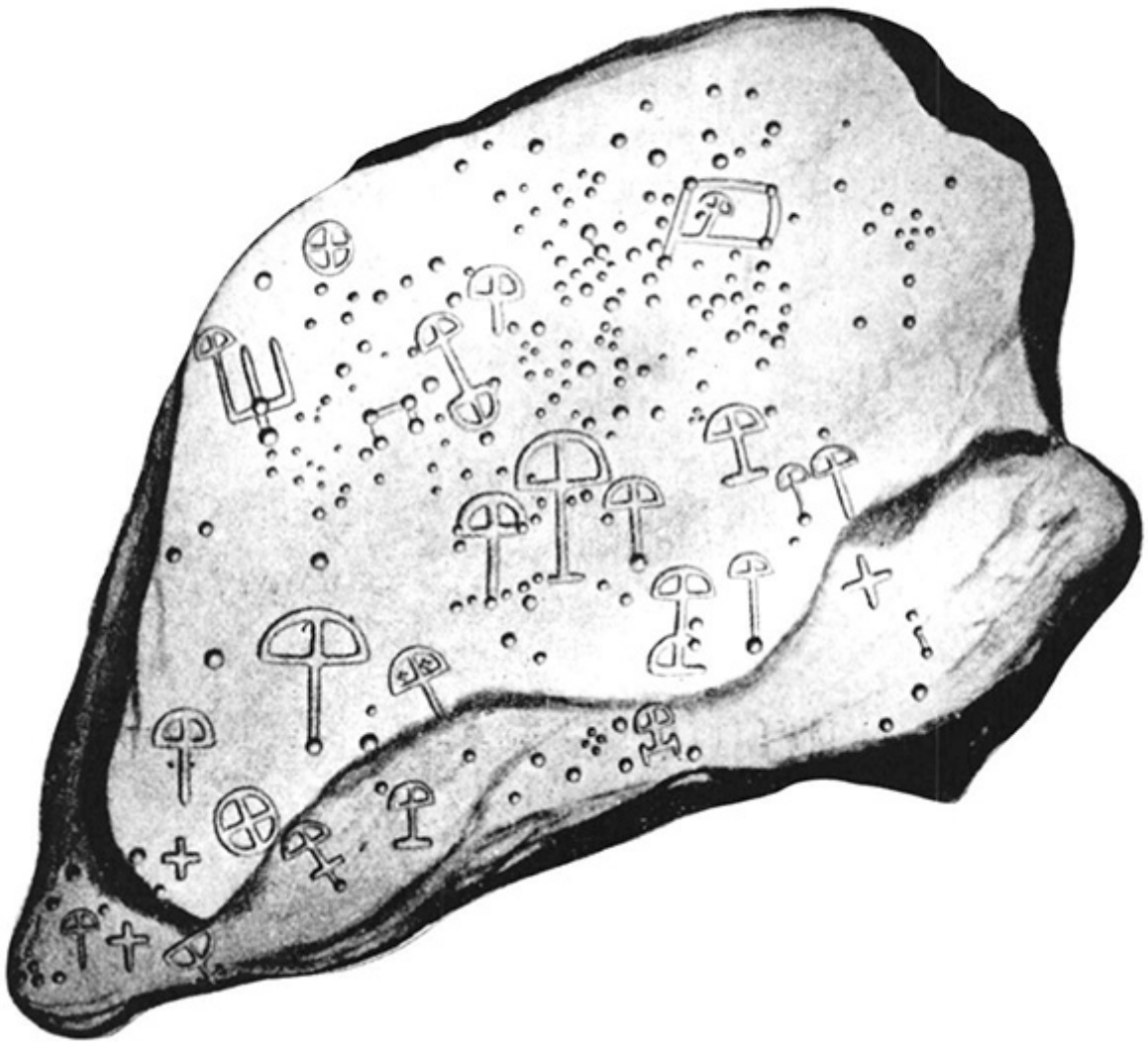
The meaning of cupules in all probability did not remain constant from the Mousterian age to the end of the stone age. Here too, as elsewhere, the principle of multiplicity of meaning and the uncertainty factor must play their part. Actually, a series of hypotheses is available: an image of the starry heavens; a form of script, no longer decipherable; receptacles for holding rainwater which thereby acquired special attributes (Spahni, 1949, pp. 53, 54).

To conclude: a sporadic interest in stone blocks covered with these symbols began to stir at the beginning of the nineteenth century. This interest increased greatly around 1850 and became ever stronger at the turn of the century, reaching a climax at the fourth congress on prehistory, at Chambéry (1908). A valuable bibliography on the study of cupules, containing over three hundred titles from 1801 to 1908, was issued by this congress, which had brought the problem to the fore.

After this, however, interest rapidly dwindled, for precisely at this time the cave paintings, after a long period of hesitation, attained formal recognition.



85 . COL DU TORRENT (*Valais, Switzerland*): *Block with cupules and rings enclosing a cross. Drawing from Schenk, 1912*



86. ZERMATT (*Valais, Switzerland*): *Block, found over 2000 m. high, with small cupules, abstract human figures, and rings enclosing crosses. Drawing from Schenk, 1912*

COLORED DOTS AND DISKS

Painted dots and disks (*ponctuations*) represent another version of the circular symbol. They are related to the cupules and occur even more often than these circular indentations in the rock, and, like them, they vary greatly in size. Their painted character renders them much more malleable. The great majority of them are red; much more rarely, black. At first they were thought to be signals or signposts, pointing out the way. This would seem hardly necessary in view of the much sharper senses with which men of the ice age were endowed. In fact, colored dots appear in the most varied places and in the most varied combinations, only a few of which are noted here. Other instances of their occurrence can be seen throughout the entire book.

268 col

Isolated groupings: At the end of the cavern of El Castillo are several ascending rows of dots. They branch out in coral-like ramifications: in the uppermost rows the dots are larger and more widely separated, lower down they are smaller and closer together.

250, 257 col

Groupings between other symbols: Also in El Castillo, loose rows of dots are inserted between clearly outlined tectiforms. These are in groups of three, four, six, and more rows, which extend over the low ceiling. The cavern terminates in this secret corner, where the two sides of a rock cleft come together.

106

Dots as a reinforcement of other symbols: Dots and disks, often of substantial size, sometimes surround certain symbols. Upon the right-hand block in the so-called Throne Chamber in Pech-Merle, a hand surrounded by a red aureole is accompanied by large red disks.

214

The strengthening effect of this orchestral accompaniment is even more noticeable in the sanctuary of Le Combel, also in Pech-Merle, where a stalactite in the form of a female breast is completely surrounded by red dots.

323

Dots in relation to animals: Here a question can easily be raised: when dots are related to animals, are they a painterly indication of the animal's markings or are they a strengthening or intensifying symbol? No doubt is possible in the case of the horse and lioness group at the entrance to the sanctuary of Le Combel, Pech-Merle. Here the large disks have been placed outside as well as inside the outlines of the animal forms.

410, 511

The relation of dots to animals occurs under most varied conditions. In Lascaux one finds fields of dots partly within and partly outside the outlines of the colossal bulls in the main hall; long rows of dots extending along the right wall of the axial gallery; and a group of four dots in a strange position beneath the upcurved tail of the rhinoceros in the "well," with its famous scene. In this case there is no proof that the dots have any relation to the departing rhinoceros.

149

The picture of the two large horses in the main hall of the cavern of Pech-Merle is dominated by dots: in this case black and of varying sizes. They are placed both inside and outside the forms of the animals. They definitely do not indicate the pelt or the

species of the horses. This use of dots can be frequently observed in Lascaux, particularly in the frieze of ponies along the right hand wall of the axial gallery.

149

Small red dots cover the entire body of a late-Magdalenian bison in the cavern of Marsoulas (Haute-Garonne). The horns and head are painted in black. Here, indeed, we are not confronted by a painterly forerunner of the impressionist school. It is more likely, as Leroi-Gourhan has remarked, that on "the speckled bison there seems to be a field of carefully arranged dots" (1958, p. 316).

148

Upon the earliest remaining fragments of the frescoes in the fourth-millennium "painted temple" of Al'Uqair (Iraq) are two excellently preserved animal figures. The question is: are these animals leopards or lions? But leopards are not normally shown as heraldic supporters. The coats of both animals are painted with unnaturally large dots, which are very reminiscent of the spots on the two horses in Pech-Merle. This instance is very possibly a survival for which intervening links are lacking.

150

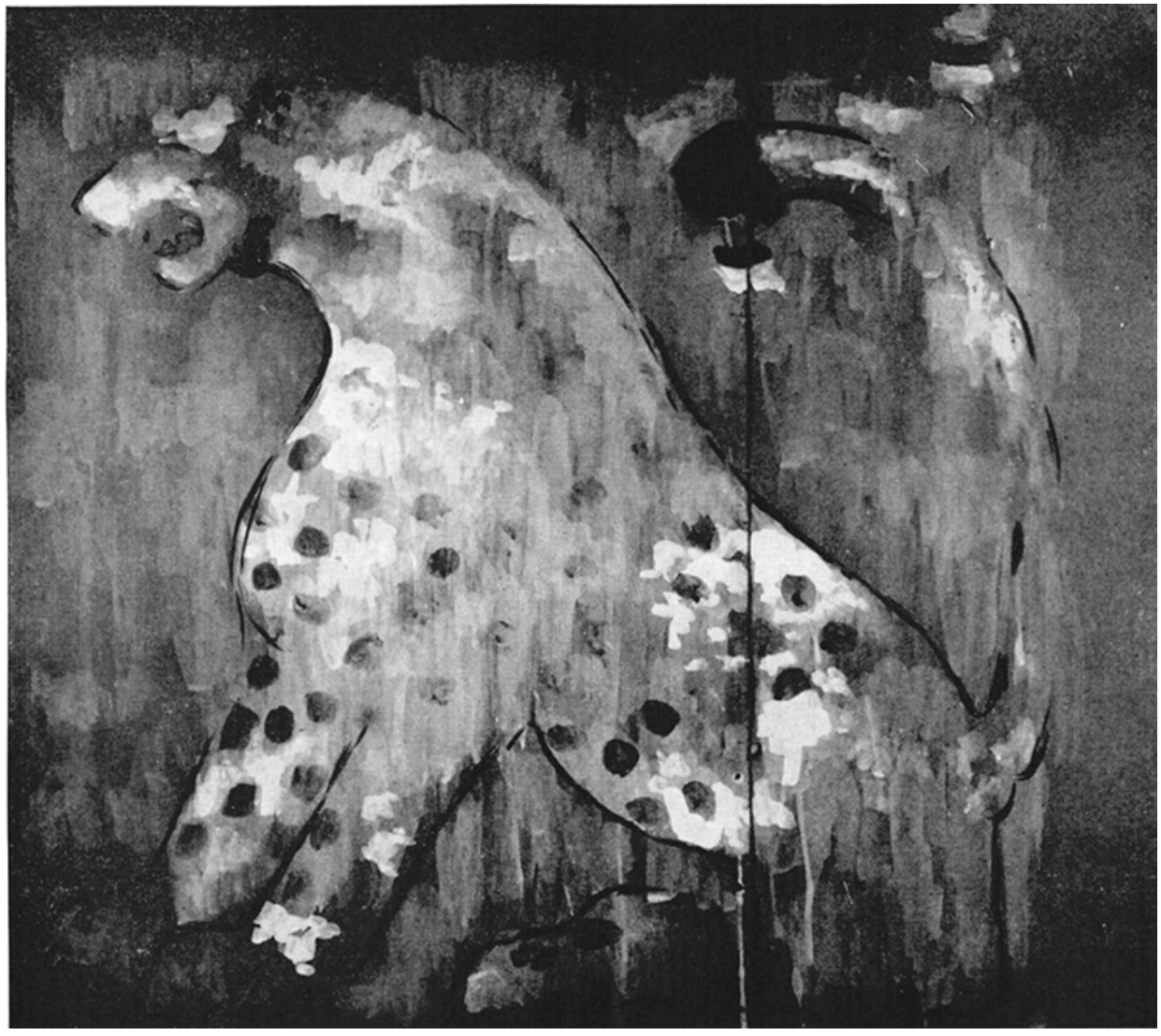
Outlines composed of dots: In a lonely valley not far from the small town of Ramales (Santander) is the cavern of Covalanas, which contains several groups of animals outlined in a series of dots. In one group a hind has her head turned backwards, as it occurs so often in primeval art.

149, 268 col

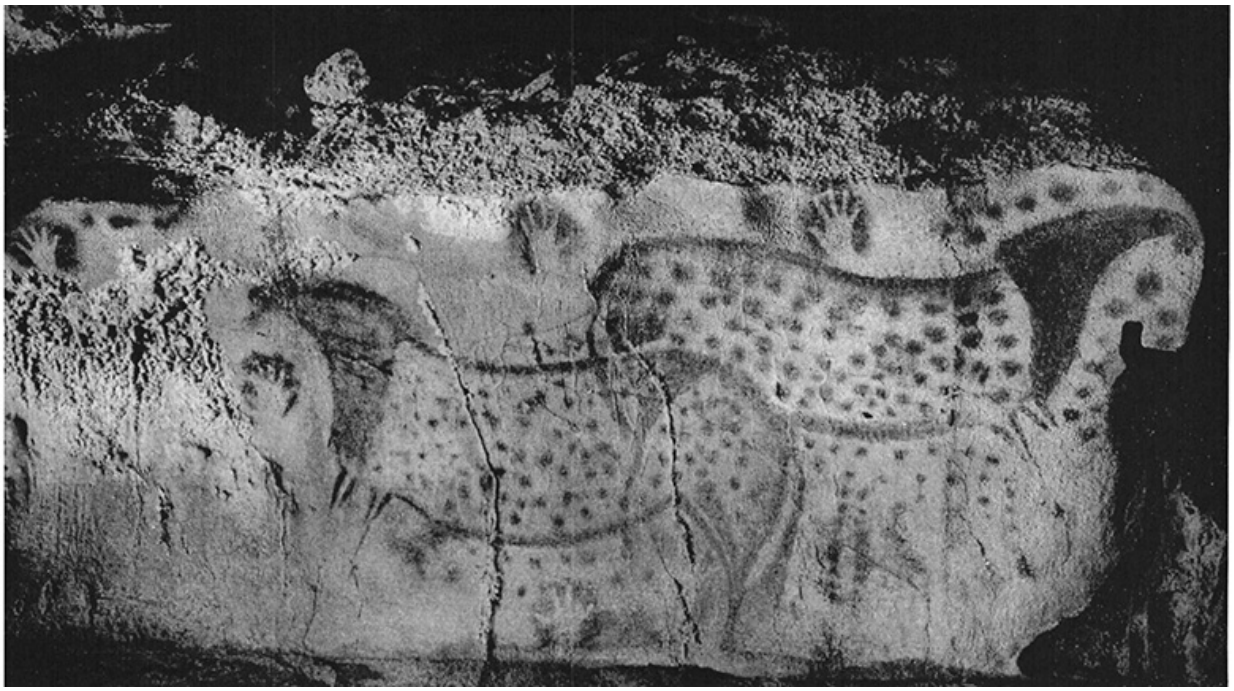
Do the dotted outlines of these animals just represent a certain method of painting, or have they some deeper significance? Nobody knows. It is possible that these series of *ponctuations* have some hidden meaning, just as the small dots which cover the body of the late Magdalenian bison from Marsoulas. Breuil considers them "a variation of the figures with broad lineal contours which represent a stage of Perigordian art in the Franco-Cantabric region" (1952, p. 347).

We believe that the different groups in the cavern of Covalanas do not all belong to the same period, but that they range from the late Perigordian to the Magdalenian age. The flexible outline, incorporation of movement, and indications of modeling of the body surface — as shown in the red hind toward the end of the cavern —were not achieved before the Magdalenian period.

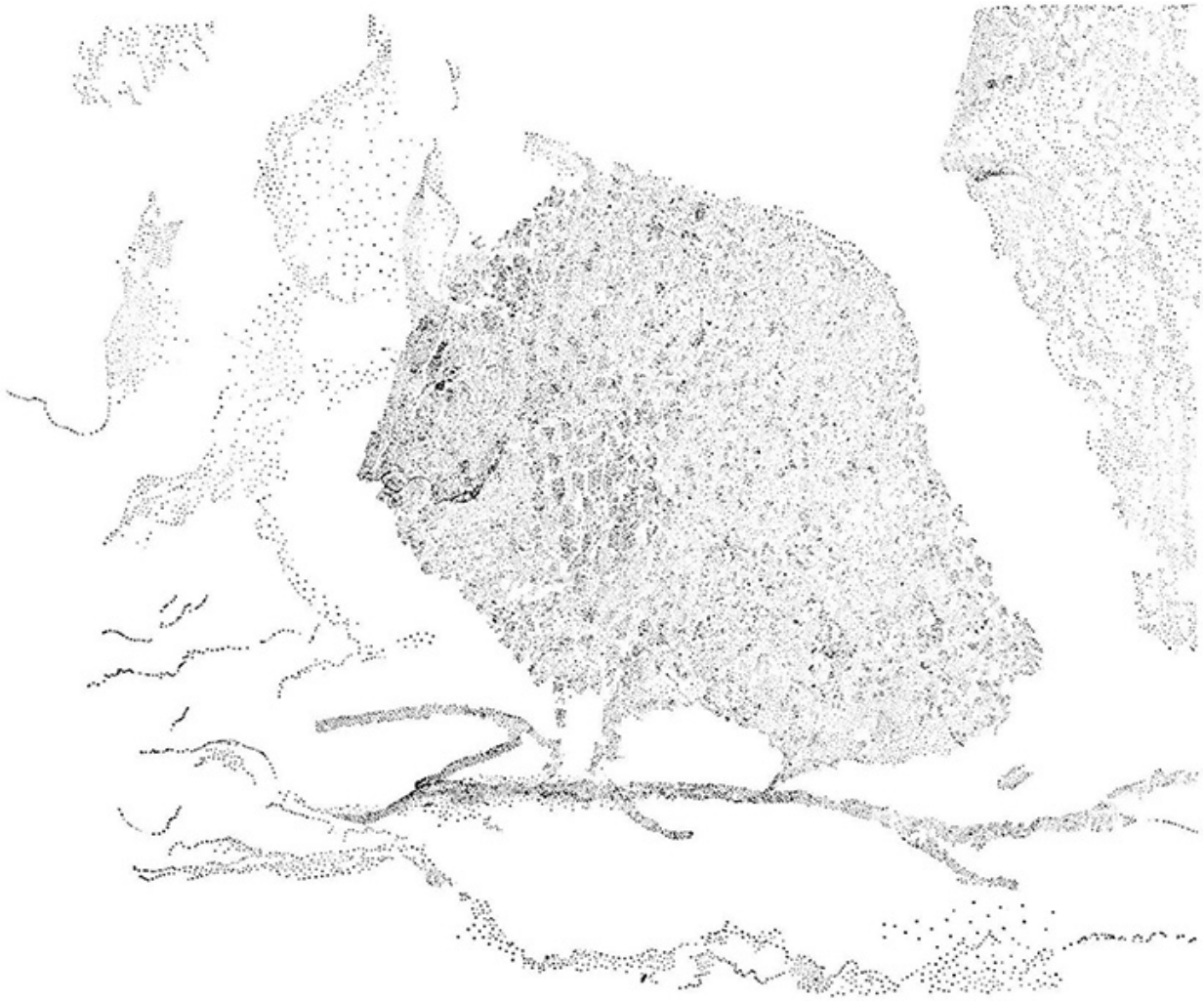
Drawing for fig. 88



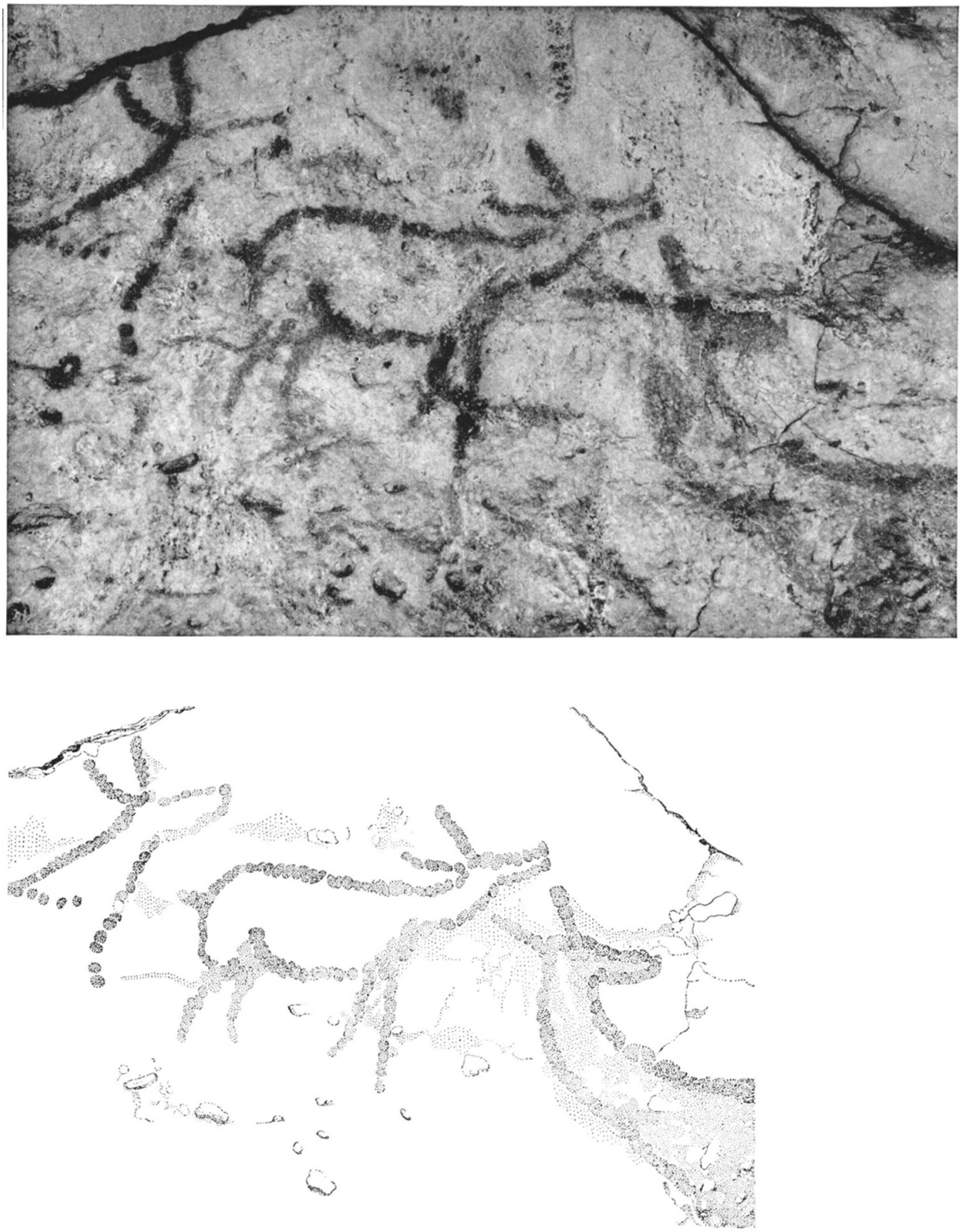
87. AL'UQAIR (*Iraq*): *Lion* (?) *painted with large dots, from late-fourth-millennium temple* (*copy of fresco*)



88. PECH-MERLE (*Lot*): *Aurignacian horses with large dots placed both inside and outside their outlines*



89. MARSOULAS (*Haute-Garonne*): *Small bison* (*87 cm.*) *with black painted head and horns*, *whose outline and entire body are painted with little red dots* (*drawing; cf. col. pl. XVIII*, *p. 268*)



90. COVALANAS (*Santander*): *Hind outlined in a series of dots. With drawing*

The location of dots: The placement of dots (and of short straight lines, or *bâtonnets*) in the caverns has been carefully studied by Leroi-Gourhan. "At first sight, these numerous painted dots or strokes . . . seem to be distributed haphazardly. It appears, however, that their presence before and after the sanctuary . . . is the result of deliberate

intention. . . . The presence of these marks is so consistent that, in more than forty caverns, there was only one in which we failed to find them" (1958, p. 316).

Like the cupules, dots had a ritual significance. Possibly they have even more meanings. In an unpublished manuscript on the sanctuary of Le Combel, the Abbé Lemozi considered them "among the most mysterious and least studied" symbols and records a number of possible or attributed meanings: among them, "a wound, a personal brand mark (*prise de possession*), bewitching by means of an aureole, a mouth, an eye, the head of a man, tattoo marks, breasts."

140, 214

The meaning of dots and disks: At present it is difficult to give any precise meaning to these symbols. They fall into the same category as the cupules and, like them, serve to augment and strengthen the appeal for increased fertility. Upon an early Magdalenian block from Laugerie Haute (Dordogne), the outline of a large cupule is united with the outline of the back of a horse. This expresses the same desire for procreation as the wreath of red dots which encircles the breastlike stalactite in the sanctuary of Le Combel. The use of dots on the bodies of animals to denote ritual significance persisted as long as did the veneration of animals. Even in the Late dynasties of Egypt, papyri show the Hathor cow emerging from the Mountain of the West covered with dots organized as trefoils (Piankoff, 1957, p. 22, fig. 2).

Whether the life-bestowing strength of the sun plays some part in the form of these red circular symbols cannot be definitely determined. Inscriptions on Egyptian sun temples of the Fifth Dynasty depict the sun as a flat disk. It is not known how far back this method of presentation reaches. It was depicted as a disk, as a disk with a dot in the middle, and as a disk encircled with a ring. All these forms are well known as prehistoric symbols which also occur with some frequency in the neolithic period.

The Egyptologists face the same uncertainties as the prehistorians in attempting to determine the meanings of these symbols. H. Schäfer expresses it as follows: "F or the Egyptians the sun was a somewhat lentil-shaped disk, not a ball. Why their hieroglyphs depict it not only as a flat disk but also with a dot, or better with a small circle in the middle, or surrounded by a ringlike band, we do not know" (1936–42, pt. I II, p. 114).

In both form and meaning these hieroglyphs are related to the symbols of prehistory, but, like these, they elude precise definition.

ROUND FORMS, THE DRUM, COSMIC SIGNIFICANCE

The symbolic relationship of a red disk to the sun or the stars, however apparent it may seem, remains but conjectural.

The meanings of circular forms are so manifold — so polyvalent — that they can only be captured within a very fine-meshed net. But certain likenesses hover around all

of them, and these likenesses amount to a consensus of meaning.

A reflection of some of these forms can be found in the customs of certain primitive peoples from far later times: for example, their use of circular or somewhat oval-shaped drums. Among the circumpolar peoples the form of the drum and the representations drawn upon its membrane bore a direct relation to the sun. In the hands of the shaman it became a ceremonial ritual instrument: a round sounding surface of oracular significance.

The origins of the drum are uncertain. We find no trace of it in prehistory, as we do of the flute and the conch shell, and no representations of it are known. The earliest record of a drum is from the Middle Kingdom in Egypt, from a tomb at Beni Hasan. This is described as "the most ancient in the history of music" (Hickmann, 1956, p. 21). It is a tall cylindrical drum, not unlike those depicted during the Third Dynasty of Ur (around 2000 B.C.). The form of these huge standing drums continues to this day among some African tribesmen.

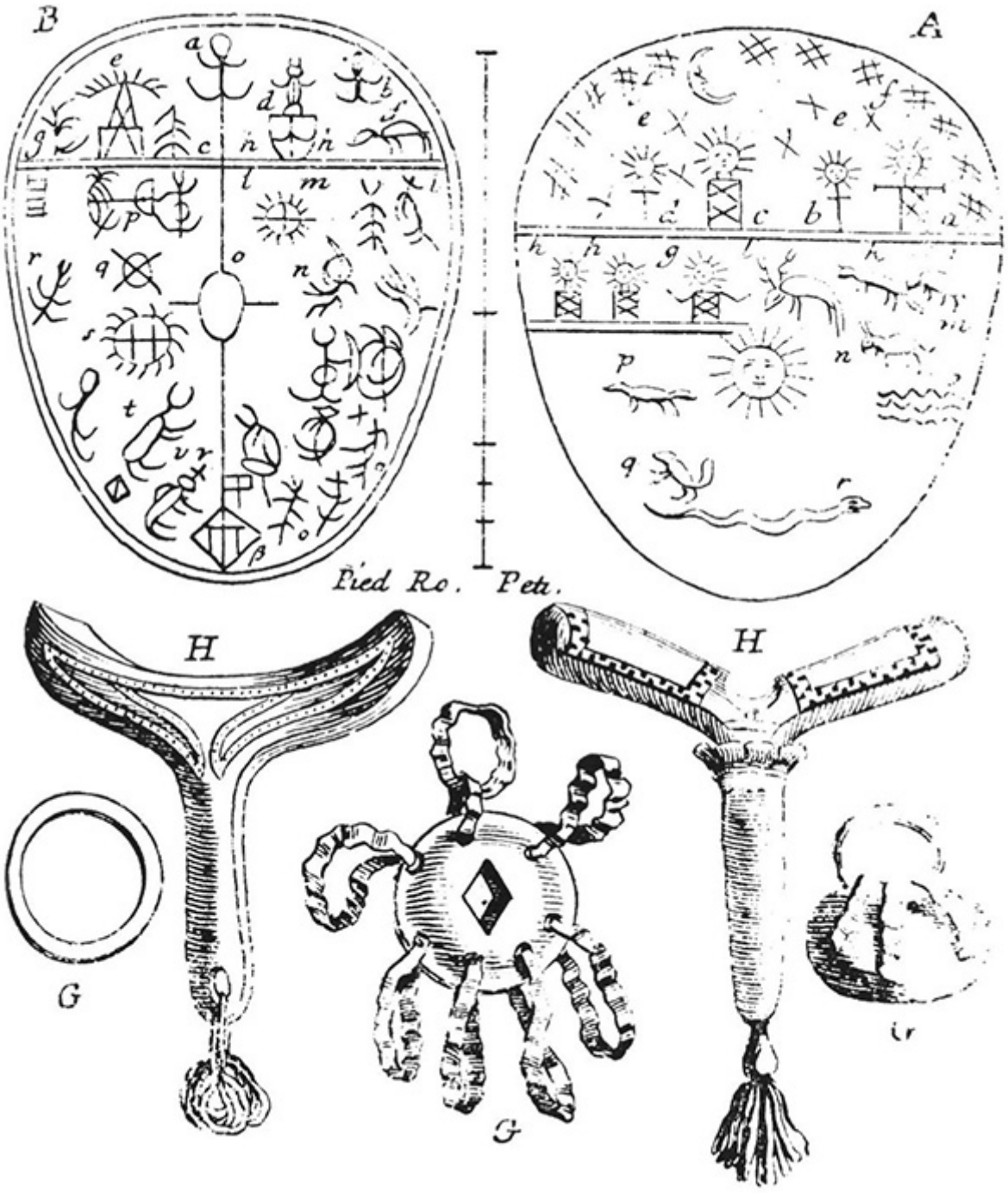
The shamanistic drums have no connection with this type. Their sound is soft. They are more closely related to the tambourine, which was used in Egypt, among other places, as an accompaniment to dances that were closely connected with ritual. The flatness of their form and their handholds thus become understandable.

Ritual drums of the Lapps

below

The most ancient drumstick known is of bone and was excavated in 1928 from a burial place on the island of Oleni, north of Siberia in the Kara Sea, which was inhabited by Lapps. The stick is T-shaped, strongly reminiscent of the form of a *bâton de commandement*, though without any perforation. It is supposed to have been used to sound the shaman's drum (Findeisen, 1957, p. 158). Similar drumsticks are shown in a very early history of Lapland by Johannes Scheffer, which explains the connection between the sun and the circular form of the shamanistic drum. This extended even to the selection of the tree from whose hollow trunk the drum would be made. This "must be of a Pine, Firr or Birch-Tree, growing in certain particular Places, and turning according to the Course of the Sun" (Scheffer, 1673; tr. 1704, p. 124) — i.e., "when the Grain of the Wood, turning from the Bottom to the Top, winds from the Right to the left Hand; this being a Token to them, that the Tree is acceptable to the Sun, which, pursuant to the Mysteries of their Religion, they Worship" (p. 125). Then, to the drum itself: "Over this they stretch a Skin, fastened to it with Nerves, painted with divers rude Shaped Figures, drawn with Blood or some other Red Colour" (p. 137). The representations drawn upon the drum skin varied, but the following description seems to give the general principles: "About the middle of the Drum, they draw several lines . . . all the figures above these Lines, representing Birds, Stars or the Moon. Below them, in the Centre of the Drum, stands the Sun, as the middlemost of the Planets, upon which

they put the Bundle of Brazen Rings as often as they intend to beat the Drum. Under the Sun they place the terrestrial Things, and various Sorts of living Creatures" (p. 126). On the other side of the drum is "the Handle to hold by. . . . Some hang about their Drums the Claws and Bones of several Creatures" (pp. 125, 243). Scheffer has an engraving of a man tapping a drum on which lies a brazen ring. Beside it the same man is shown lying in a trance, with the drum placed upon his head.



91. LAPLAND: *Shamanistic drums with representations of sun in center. Also T-shaped drumsticks and brazen rings to place on the drum for divining. From Scheffer*, 1704

below

The form of the drum, the cautious use of a stick similar to a *bâton de commandement* to bring forth its sound, and the bronze rings from whose movements an answer could be divined as to whether a certain enterprise —such as a bear hunt — would prove successful, show the complex nature of this apparently very simple instrument. The disk of the sun forms a potent background for this sounding symbol.

The ritual drum of the goddess Inanna

Though no prehistoric representations of drum or drumsticks have been found, literary references show that the drum must have been held in high regard before the dawn of history. How otherwise could a drum and a drumstick have become the cause of a shift to tragedy in the Gilgamesh epic?

92. LAPLAND: *Shaman using the drum, and another lying in an ecstatic trance with drum on his head. From Scheffer, 1704*

S. N. Kramer, who translated some of the earliest known Sumerian tablets of Gilgamesh, which he had found in the Istanbul Museum, recounts that Inanna, goddess of love and war, had planted a holy tree before her city of Uruk (Erech), which she later found she could not cut down "for at its base the snake who knows no charm" had built its nest and "in its crown the [lioness-headed] Imdugud . . . bird had placed its young" (Kramer, 1956, p. 223) . Gilgamesh "chivalrously came to her aid" (p. 196) and killed or drove away the menacing creatures. The hero then cut down the tree. "What did Innanna do? From the base of the tree she fashioned a *pukku* (perhaps a drum); and from its crown a *mikku* (drumstick)" (p. 223). But drum and drumstick fell into the nether world and Gilgamesh was unable to retrieve them. Enkidu, the companion of Gilgamesh, then "volunteered to descend to the nether world" (p. 224), from which he returned only as a shade.

Both the Lapland tale of a drum made from a trunk whose grain follows the course of the sun and Inanna's drum cut from a mystic tree suggest the magic significance of this instrument, long before it has become associated with warfare.

PERFORATIONS

Artificial rings

right

On a stone block from the Aurignacian rock shelter of Labatut (Dordogne), preserved in the museum at Périgueux, is an artificially made stone ring. The hourglass shape of the two cupules which meet to form this perforation is very evident, also the great care with which the hole was bored through. This "artificial ring" penetrates a projecting ridge of the block which would simplify the hanging up of objects upon a cord passed through the ring. Cord is known to have been made in prehistoric times.

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Another example of artificial rings is in a block from the Abri Cellier, Sergeac (Dordogne), which is in the museum of Les Eyzies. Here the two openings of the curved perforation are adjacent to one another, which makes their cupule shape stand out even more strongly.

159, 384

Artificial rings from the later periods of prehistory can still be found *in situ:* for example, in the animal frieze at Le Roc de Sers (Charente), from the Solutrean period. In the beautiful frieze of horses at Cap Blanc (Dordogne), from the middle Magdalenian period, there is an artificial ring on the hind quarters of one of the horses. The body of the horse bulges strongly outwards. The piece of rock containing the ring links the body of the animal to the overhang, rather like a triangular wedge. There is an artificial ring connected with the single bison of the great frieze at Angles-sur-Anglin (Vienne), which is also from the middle Magdalenian period.

It is difficult to believe that these rings were used to string cords in order to suspend skins as a means of wind protection. It is much more likely that they were used for the hanging up of sacrificial donations. In the sanctuary of Cap Blanc, where the ring is in such a prominent position in relation to a sacred animal, it is inconceivable that it would have been placed there for a mundane purpose. Moreover, the shape of the perforation as a double cupule announces its connection with fertility symbolism.

PERFORATED CIRCULAR SLABS

160

In La Quina (Charente), H. Martin found an approximately circular slab nearly five inches thick and weighing about nineteen pounds. Its rim had been badly damaged. In the center was a large perforation, and along its edge the remains of two other smaller

perforations. Martin insists that a perforated bone staff (*bâton de commandement*) "touched the stone" (1906, p. 23). This is similar to a perforated slab excavated at Veyrier, near Geneva, at the foot of Mont Salève, where the stone slab lay close to a perforated bone staff (Schoetensack, 1901, p. 140).

One cannot quite accept the opinion of the excavator of La Quina that the perforated stone slab was a heavy shackle for tethering animals (Martin, 1906, pp. 21–22). It is difficult to believe that animal husbandry was practiced by the Aurignacians. It is far more likely that here again we are dealing with ritual objects: perhaps the first beginnings of sacrificial stones or altars. Their close association with *bâtons de commandement* would also seem to support this view.

An immense hiatus exists between these perforated circular slabs from the Aurignacian and Magdalenian periods and similar round stones dating from neolithic times, or even later, in which both stones and holes sometimes attained a very large size.

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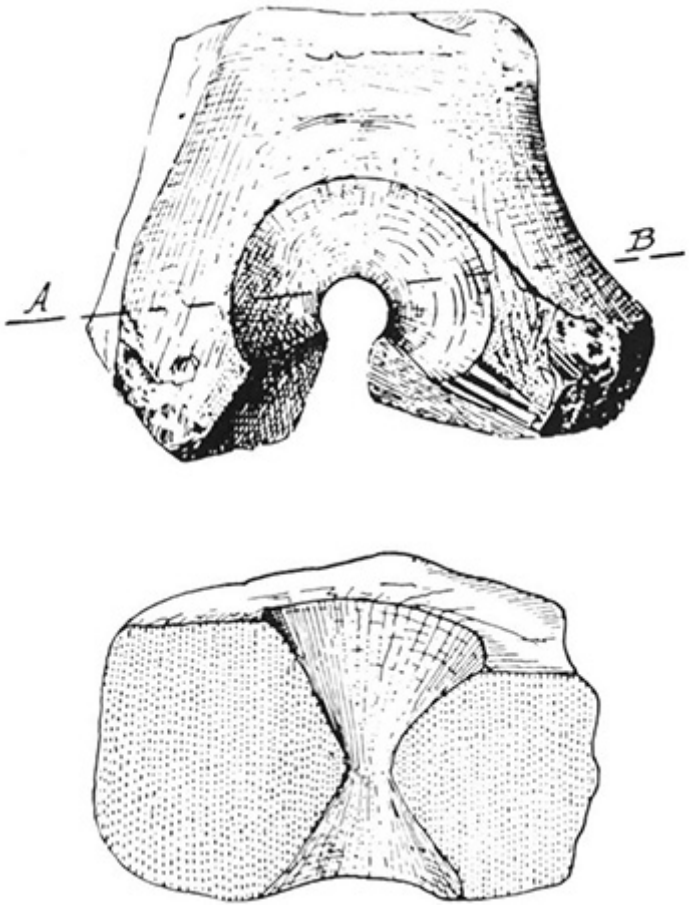
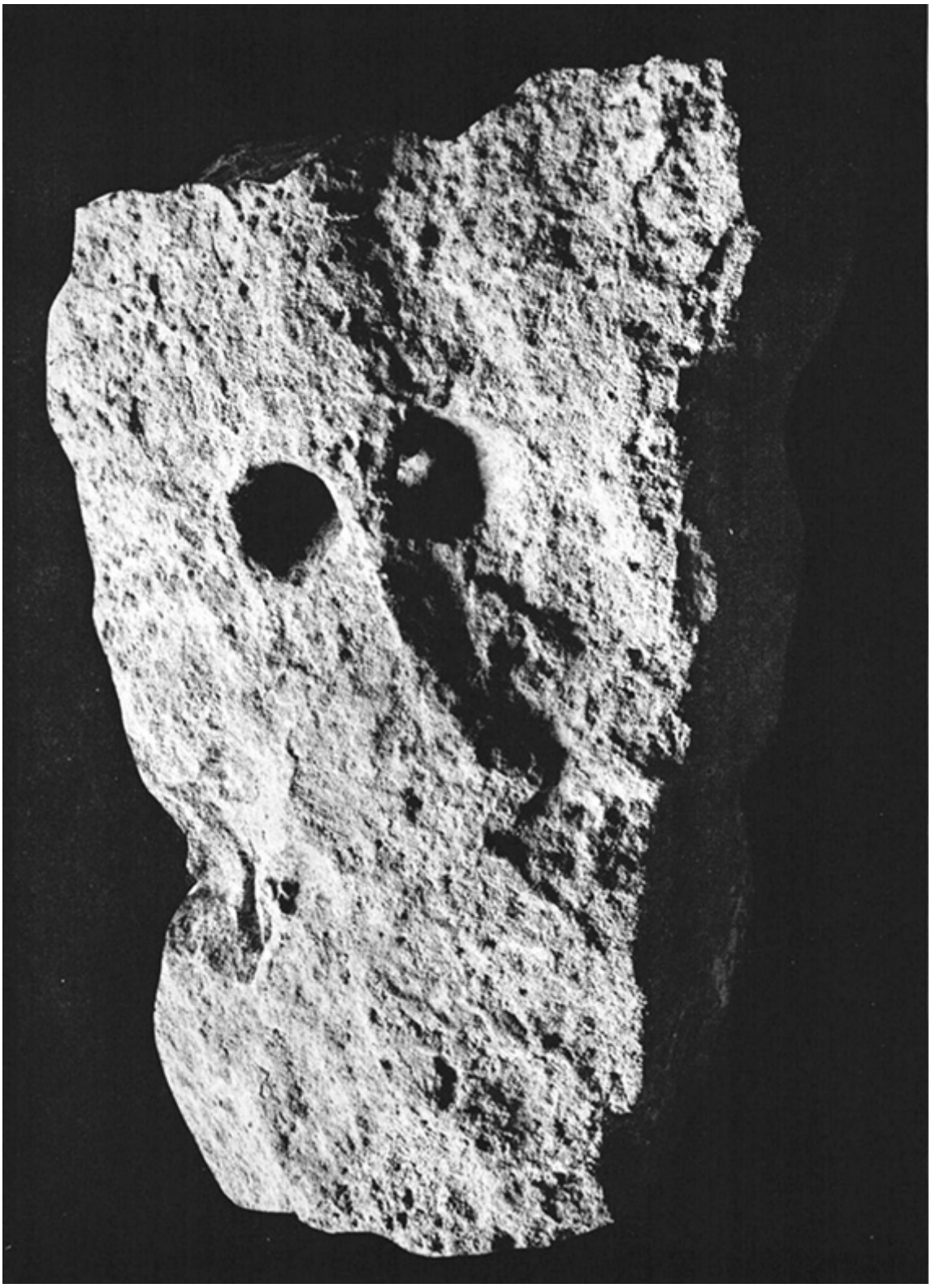
These retain one outstanding likeness: the shape of the perforation itself. Even in stones more than a foot thick, the hole retains —as in the Aurignacian era — the shape of two cupules which meet in the middle. This method of piercing has been called countersinking. These "holed stones" were sometimes circular; "others again are broad slabs of irregular outline" (Lukis, 1885, p. 17). In Cornwall, there are two exceptionally large stones. One, called Tolven, has a hole "sixteen inches in diameter bored through its center. The section shows that the hole was made by picking away the opposite sides equally." Even larger is "a granite block 'Menetol,' rudely circular," which is nearly four feet in diameter and a foot thick. Its hole is 21 inches across. Both these slabs were found standing erect. Whether these circular objects had been tipped up at some later date but were originally used horizontally as altar stones is beyond our knowledge. It is at least certain that they were not employed for tethering animals, any more than their distant precursors of Aurignacian times. The magic spell they cast can be sensed even today. "Within memory it [the stone Menetol] has been used superstitiously for curing infirm children by passing them through the aperture" (Lukis, p. 17). A recent archaeological guidebook, in describing the "unique ruins of Menetol," says "the one extraordinary feature of Menetol is a large, thin polygonal slab with a perfectly round hole through its centre. . . . We shall find 'port hole' entrances elsewhere in megalithic architecture, but few as perfect as this one. Until quite recently it kept magic properties" (Hawkes, 1951, p. 169).

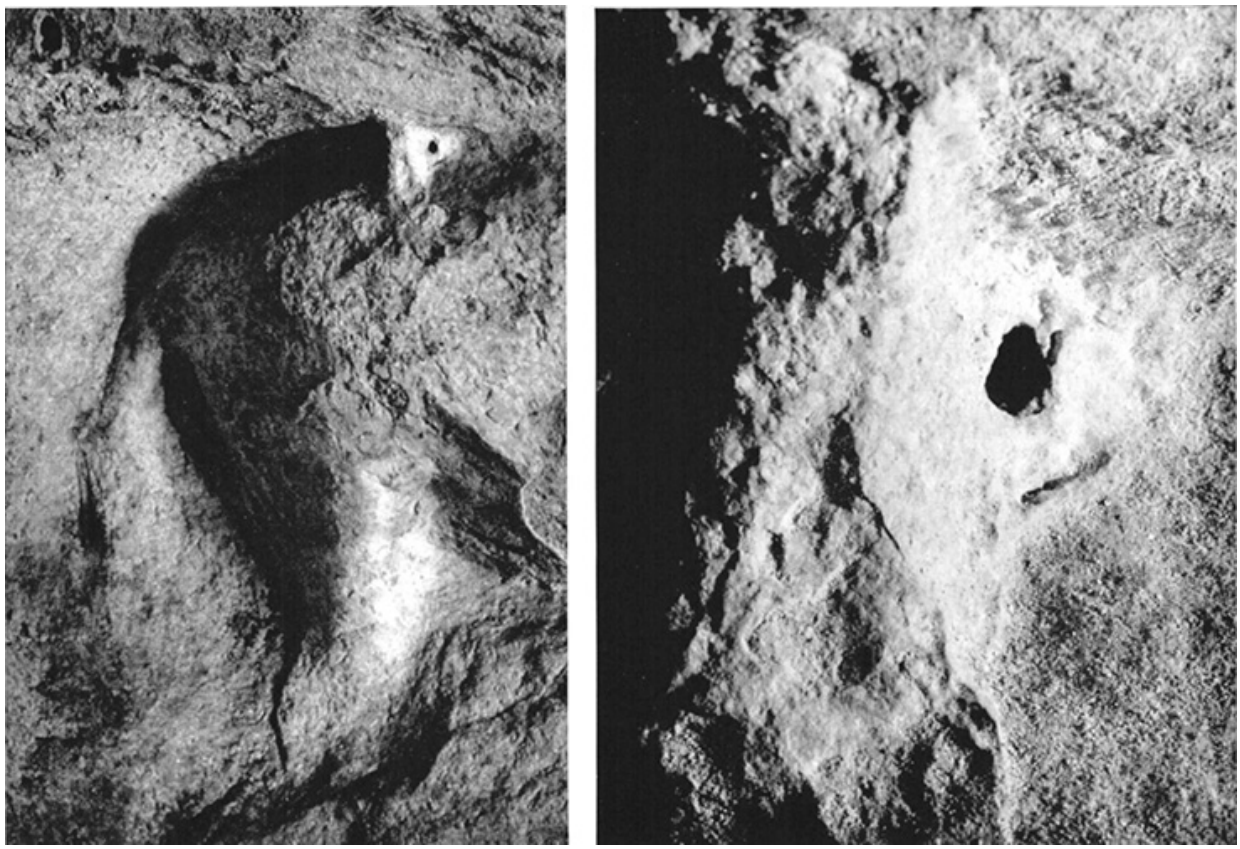


93. LABATUT (*Dordogne*): *Stone ring, perforation in section. Drawing by R, Maurier*

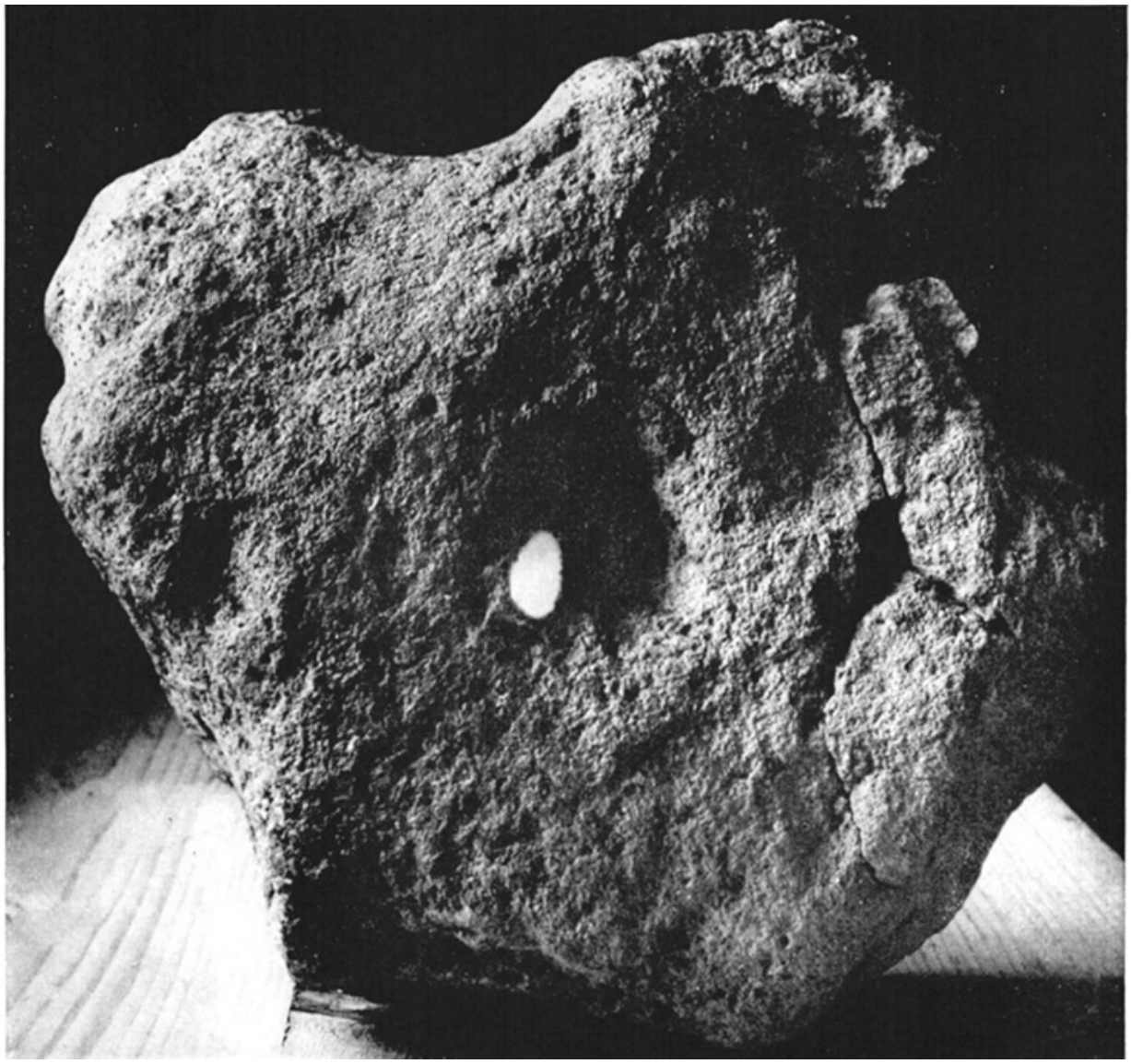
94. LABATUT: *Artificially made stone ring through the ridge of a block, upper Aurignacian*



95. ABRI CELLIER (*Dordogne*): *Curving perforation through the surface of a stone block; the two openings adjacent to one another.*



96. CAP BLANC (*Dordogne*): *Hindquarters of horse with artificial ring above. Right*, *detail of ring* (*cf. fig. 246*)



97. LA QUINA (*Charente*): *Stone block with large perforation*

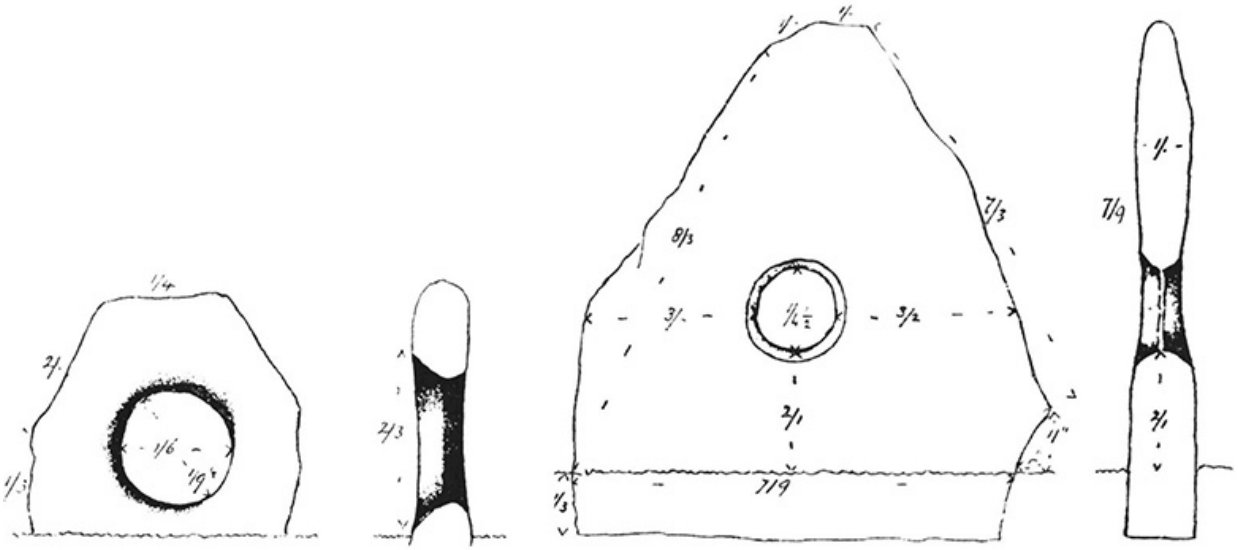
PERFORATED BONE STAVES: *BÂTONS DE COMMANDEMENT*

Even the most superficial observer cannot fail to notice the remarkable frequency with which circular perforations occur in small art objects: "portable" art (*art mobilier*). Only rarely is it a simple, cylindrical hole. Usually the perforation consists —as already mentioned —of a kind of double cupule. It can also be elongated: oval, in the form of a rhomboid or a slit.

In seeking for a precise meaning for these perforations, we are, if possible, even more helpless than in the case of the cupules. Most of the various small articles are cult objects, in which the perforation is often related to engravings upon them. Moreover, the perforation is usually of notable size in proportion to the object. There are several kinds of such small art objects to which definite names have become attached — *propulseurs*

(spear-throwers) and *bâtons de commandement*— without there being any certainty as to their original significance.

98. CORNWALL (*England*): *The circular stone "Menetol" and neolithic monoliths*



99. CORNWALL: "*Menetol*" (*1 ft. 9 in. hole) and "Tolven" (1 ft. 4 .5 in .) . Drawings by Lukis, 1885*

The most widespread are the *bâtons de commandement* or perforated bone staves. The first discovery of such an object dates back to the year 1833. In the quarry at Veyrier, a *bâton de commandement* was found with a simple line engraving "which

indeed was only subsequently recognized" to be of the Magdalenian period (Bandi, 1947, p. 159).

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Bâtons de commandement first occur in the Aurignacian period in their T or Y form, but without decoration. Aurignacian staves of this kind were found, among other places, at La Ferrassie, the Abri Blanchard (Sergeac), and the Abri du Poisson (all in the Dordogne), and at the Abri de La Quina (Charente). Artistic decoration appears in the Magdalenian period, particularly in the later phase. The staves are outstanding in richness of engraving and meticulousness of sculptural treatment: obviously, products of a highly developed artistic expression. The delicacy of the engraving, the capacity to capture the essence of an object in a few strokes, is reminiscent of the etchings (drypoints) of the seventeenth century: likewise the product of long artistic development.

The delicacy and fragility, as well as the great artistry of these articles of reindeer or stag horn, argue against their general employment for utilitarian purposes, as tools or weapons. They belong to the realm of hunters' magic. They were magical aids with which to conjure either the death or the increase of the quarry. Such prehistorians of the first and second generations as Lartet and Cartailhac, as well as Reinach, already recognized them as social insignia or as magical-religious objects.

Predominant opinion, however, held that these perforated staves served practical purposes — i.e., were weapons or tools. Some archaeologists considered them death-dealing weapons, such as those used by the chiefs of North American tribes for the execution of slaves at certain festivals. Others judged them to be tent pegs, picks, sling handles, instruments for straightening arrows, and so on. Only two of these hypotheses are here taken into account: an early one and a late one from our own century. One hypothesis of about 1900 ran as follows: perforated staves are a kind of fibula, which, with the aid of a string, holds the animal skin around the neck. The staves with only one hole were worn vertically under the throat; therefore T- or Y-shaped reindeer antlers were carefully selected so that they would not impede movements of the wearer's neck or chin. A whole series of illustrations of the way in which the present-day Eskimos wear perforated staves of reindeer horn at their necks were brought in to support this theory, which became widely accepted (Schoetensach, 1901, p. 142).

100. ABRI DU POISSON (*Dordogne*): *Aurignacian perforated bone staff with no engravings*

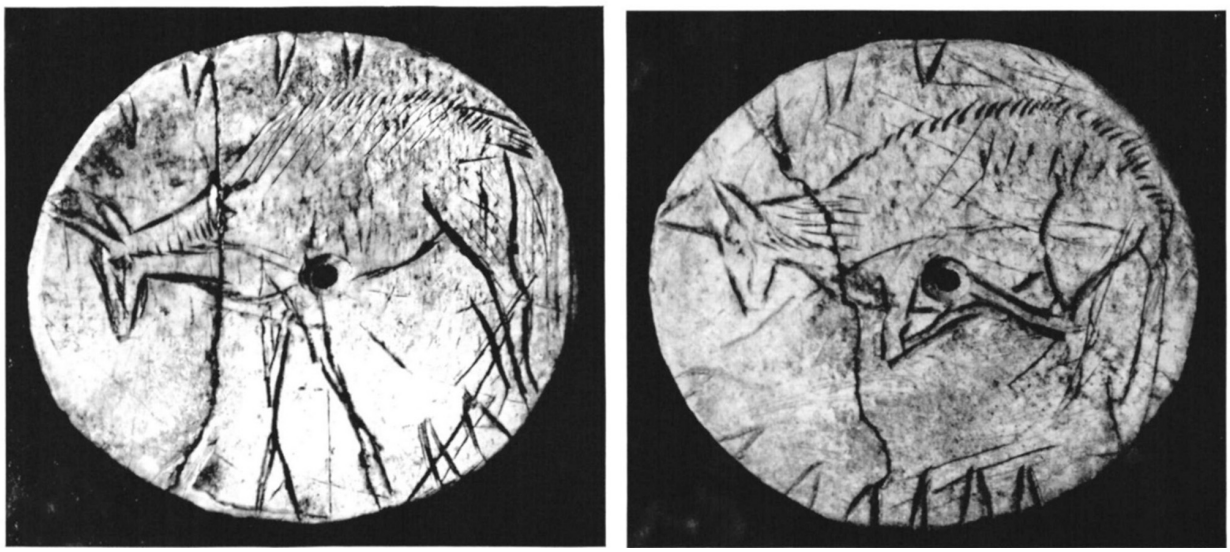
At the fourth International Congress of Prehistoric and Protohistoric Studies (Madrid, 1954), the Abbé Breuil communicated the theory of a Portuguese researcher: the perforated staves, it was argued, were employed to make cords from horse hair, analogous to certain wooden instruments (*torteiraes*) still used in Portugal. Breuil believed the theory was possible, for carbonized cords from paleolithic times were known to him: nevertheless he added in conclusion: "It must be understood that I in no way pretend that this hypothesis can be applied to all pierced staves. . . . Other highly decorated staves had, without doubt, a ceremonial function" (Breuil, 1954, p. 209).

That some perforated staves of a sturdier kind served practical ends is quite possible. These have nothing to do with the more delicately engraved staves, with their sometimes highly complex motifs.

The number of finds is remarkably large (Graziosi, tr. 1960, plates 29–106). Their motifs stress the eternal polarities birth and death; for, like the cupules and the dots, the perforated staves embrace on the one hand fertility, and on the other the bedevilment and capture of the animal. This is true of all ritual objects — staves, spear-throwers, or bone disks.

below

A clear instance of the desire for the capture of the animal is shown by a two-centimeter engraved bone disk from Laugerie Basse (Dordogne), in the Périgueux museum. In the center is a perforation. On both sides of the disk a hind is depicted, on the one side threatened by spear points ranged around the edge, on the other apparently already hit.



101. LAUGERIE BASSE (*Dordogne*): *Perforated bone disk (2 cm.) engraved on both sides with a hind: left, attacked by spears; right, already captured*

The desire for fertility is expressed in one of the first finds of the early explorers of prehistory Lartet and Christy. It is today in the British Museum: a small ivory sculpture from the Bruniquel cavern (Tarn-et-Garonne) depicting one reindeer following another (Graziosi, pl. 34).

166

An important contribution to prehistoric studies (Capitan, Breuil, Bourrinet, Peyrony, 1909, pp. 63–76) concerns a *bâton de commandement* (31 cm.) excavated undamaged in 1908 by P. Bourrinet from the Abri Mège, near Teyjat (Dordogne). This beautiful horn staff gives an insight into the complexity of the themes and the richness of their content, all contained within the narrowest limits.

We cannot decipher the interplay of meaning that these depictions had for primeval man. We can only recognize their amazing wealth and the unerringness with which they were carved by a master hand.

364, 427

A huge galloping horse is placed between two perforations. The masterly variation in treatment of the mane and pelt, as well as the relation of these hatched areas to the plane surfaces of the body, borders upon great art. The principles followed are similar to those depicted in the groups of bison in the Galerie Breuil at Le Portel (Ariège), and of several polychrome bison on the ceiling of Altamira.

167, 507

There is also the delicate head of a hind —reminiscent in its precise delineation of a similar animal on the El Pendo staff—and, near by, several snakes or long-necked birds. Finally, three grotesque hybrid figures, illustrated in nearly all books on prehistoric art: three tiny *diablotins*, "half men, half chamois" (Reinach, 1912, p. 361), which play an important role in the literature of prehistory. They belong to the same category as the composite figure on the wall of Les Trois Frères: they may represent shamans or conjurers, enticers of game.

It is interesting how again and again in the early period of prehistoric research some indication is given of the subject's spiritual interpretation. This is the case here: behind the big horse the observers saw a small one, left purposely incomplete, without hindquarters, although there was no lack of space.

"Perhaps in this deliberate incompleteness of the outline it is possible to perceive a similar notion to one which induces the Eskimos to represent spirits or shaman influences by incomplete figures of men, reduced to head, arms, and trunk. An Eskimo engraving depicting the influence of the shaman over a herd of reindeer in directing them towards the hunter, shows just such a semblance of a human being" (Capitan, et al., 1909, p. *66*).

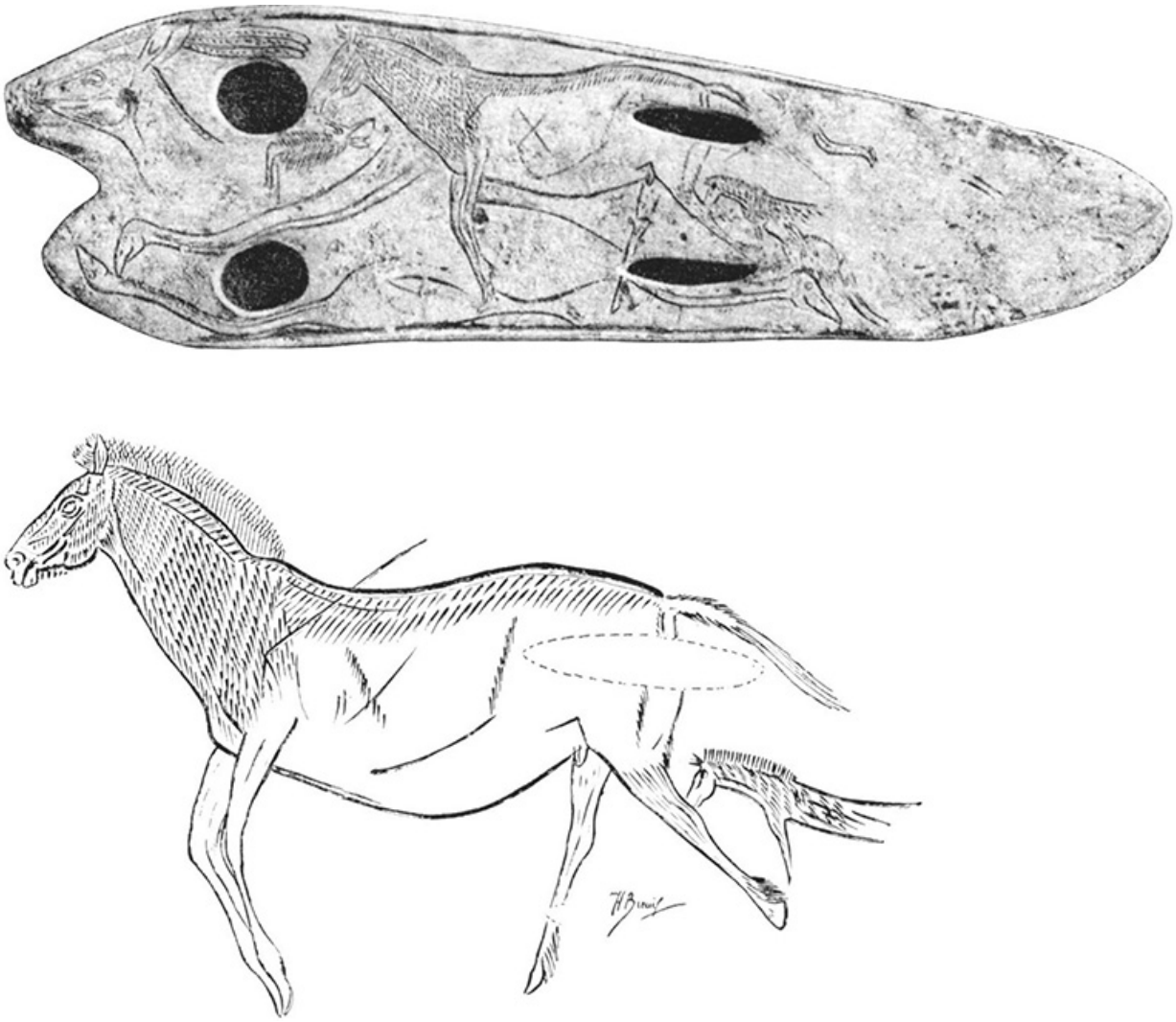
197

In some cases the two arms of the Y of a staff show a pair of animals, facing in opposite directions, e.g., the two bison on a *bâton de commandement* from Laugerie Basse (Dordogne). That these *bâtons de commandement* were associated with fertility rites is definitely implied in the fragment of a staff from the Gorge d'Enfer (Dordogne). Only the two branches of this staff and the upper part of the perforation remain. In this case we have a double phallus with line engravings: two ovals, zigzag lines, and linear signs (Graziosi, pl. 45a; Peyrony, 1948).

169

In the Magdalenian period, the perforated staff was handled in a number of ways. Strong relief carving is shown on a staff of the middle Magdalenian period from

Raymonden, Chancelade (Dordogne), now in the Périgueux museum: a large bird, its heavy body strongly sculptured, unusually large curved beak, long pointed wings jutting forward as if in a mating position, the claws curved. Originally this was considered an extinct species of penguin (Hardy, 1891, pp. 33–34), but a precise identification is better avoided.



102. ABRI MÈGE, TEYJAT (*Dordogne*): *Baton de commandement, engraved with several figures: large horse followed by smaller (spirit?) horse, diablotins, etc. Above, plaster cast, rolled out to show both sides; below, drawing of horses by Breuil*

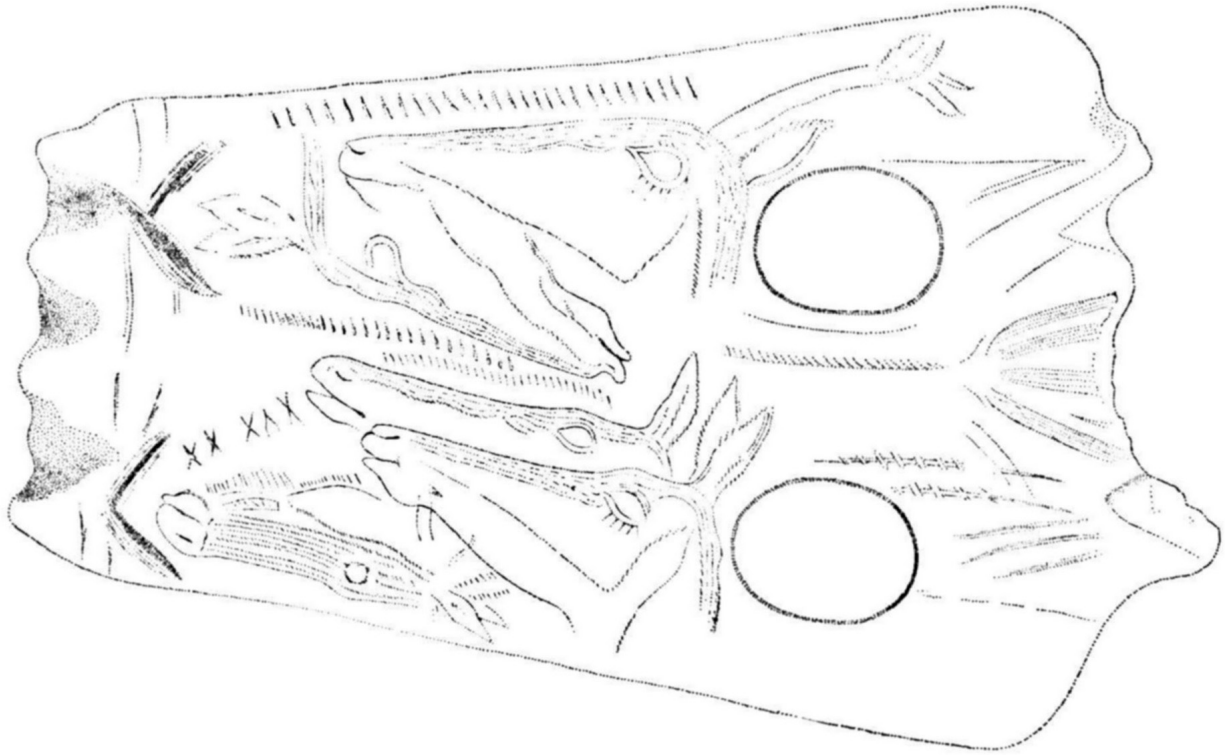
In the Magdalenian period, the original Aurignacian form of the perforated staff often lost one or both of its forked branches, and in the later Magdalenian period its artistic treatment became ever more delicate and the line more sensitive. The engravings seem to have been breathed upon the material. All is expressed in the fewest possible strokes.

255 col, below

One of the finest of these pieces is a *bâton de commandement* from the latest Magdalenian period, excavated by J. Carballo at El Pendo cavern (Santander). This

gently curving antler (oval in section) is not only engraved with animal heads but itself has become a horse's elongated head similar to the abstract drawings of the period. Where the ears would be there were four prolongations, of which one remains. Similarly, the position of the muzzle is indicated by four equal protuberances. They suggest its form without actually representing it. Instead, as becomes clear in an excellent drawing by H. Obermaier of the staff as if unfolded, or extended, these protuberances at either end represent something like a species of cupule with four points.

The upper part of the head contains the dominant circular perforation. To interpret this as an eye, as Obermaier suggests in his otherwise very subtle analysis (1932, pp. 9–16), is not acceptable. As in many other pieces, the perforation has no naturalistic meaning. It is an independent magical symbol. Often it pierces an animal at more than one place, as in the well-known wild cat from the Isturitz cavern (Basses-Pyrénées) now at St-Germain-en-Laye (Graziosi, pl. 46).



103. EL PENDO (*Santander*): *Baton de commandement, with animal heads. Drawing, rolled out to show both sides, by Obermaier, 1932 (cf. col. pl. I, p. 255*)

Within the narrow limits of the staff from El Pendo, several animal heads are finely engraved: a stag, three large-eyed hinds, a horse. Just as in Aurignacian times, when the hand signified the entire man, so here heads signify entire animals. The technique is perfect. At times with a single stroke, at times by hatching, the essential is expressed with the utmost economy. "Again in this piece one can observe some other engraved signs resembling harpoons, which are situated near the rim of the perforation"

(Obermaier, 1932, p. 12). In addition, near the muzzle there are cruciform signs, probably hunting marks or abstract indications of human figures. Obermaier directs attention to a similar *bâton de commandement* from the cavern of El Valle, close to El Pendo, on which harpoons and what definitely are abstract human figures are similarly engraved (ibid., fig. 4). This phenomenon suggests one of the functions of *bâtons de commandement:* as an instrument for casting spells.

71

The dominating perforation was separated from the animal's anatomy, as in the fox head at the end of an early Magdalenian perforated staff from Le Placard cavern (Charente), now at St-Germain-en-Laye (Graziosi, pl. 29). Here the fox's tiny eye has been incised beside a large cup-shaped perforation. In addition, the staff is covered with numerous parallel incisions, perhaps hunting signs. On the elegant middle-Magdalenian staff with a leaping horse, from the Abri Montastruc (Tarn-et-Garonne), the perforation is situated at the lower end of the slender shaft, where the narrow space compels it to assume an oval form. A somewhat irrelevant discussion has arisen as to whether this delicate piece is not a spear-thrower (*propulseur*) rather than a *bâton de commandement,* in which case it is suggested a peg might have been passed through the perforation.

On the form of bâtons de commandement

163

The original and purest form of the perforated staff appears in the Aurignacian period. All emphasis is concentrated upon the plastic form: the long shaft, slowly swelling at the end; the two short branches here only slightly damaged; the perforation at the junction of all three parts. All develops into a new suggestive and immediately striking form. It is completely understandable that the first prehistorians described it by the term *bâton de commandement.* In a certain sense it is indeed this, but scarcely in the customary sense. It is not a staff signifying sovereignty over men. Its meaning is embedded in the wide sphere of fertility rites and in relation to androgynous symbols, as the *bâton de commandement* from the Abri du Poisson may help us understand.

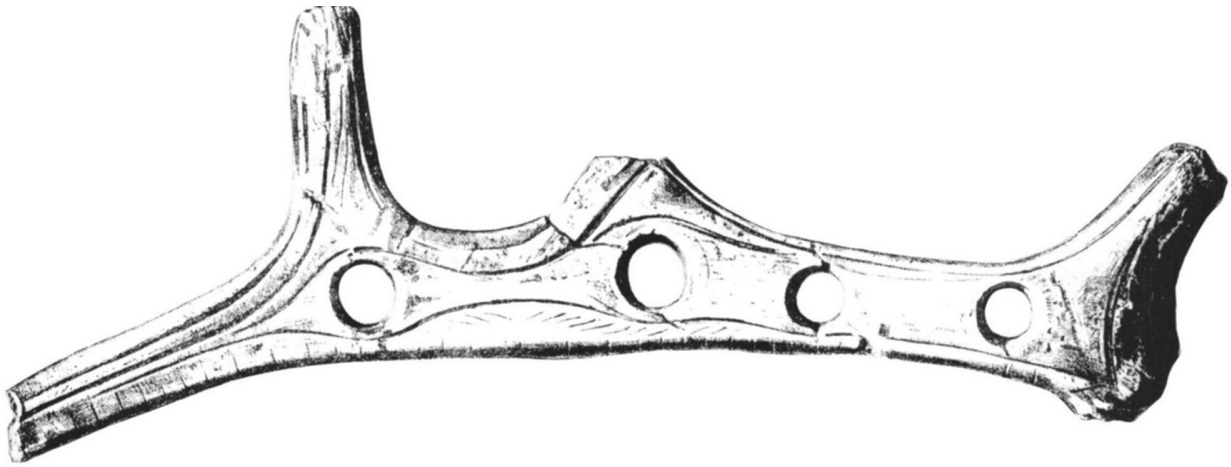
104. ABRI RAYMONDEN (*Dordogne*): *Bâton de commandement, with large bird, middle Magdalenian*

223

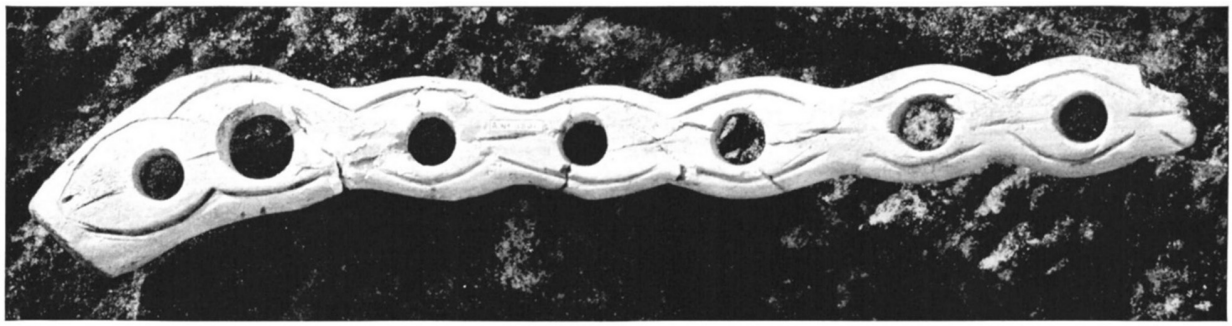
The symbol of supreme fertility is expressed by an androgynous image — the two in one. The connection of primeval images of this symbol with some of the notions of primitive peoples of today will be dealt with in a wider context.

below

Perforated bone staves do not always appear in the distinctive form of the *bâton de commandement*. Bones containing a number of holes have been frequently found. As early as 1863, Lartet and Christy had found many different forms of perforated staves from the Dordogne, later published in their *Reliquiae Aquitanicae* (1865–75). One from La Madeleine is described as follows: "Four holes of unequal diameters are pierced in the wide portions from the brow antler to the third branch or 'royal.' Four is the greatest number of holes we have yet met with in these implements" (p. 103).



105. LA MADELEINE (*Dordogne*): *Bone staff with four perforations. Drawing from Lartet and Christy, 1865–75*



106. LE SOUCI (*Dordogne*): *Bone staff with eight perforations, the last broken*

left

Since that time, other specimens have been found with many more holes, such as one of reindeer (40 cm.) with at least eight perforations from Le Souci, near Lalinde, now in the museum at Périgueux. This staff is delicate in its dimensions and certainly not

suitable for practical purposes. The holes are bordered by an undulating line, similar to the staff from La Madeleine. But in this case the staff itself has been sculptured in a scallop pattern along both its sides to reinforce the meaning of the line.

On the material of the staves

476

Yet another matter appears relevant, namely, the material from which the staves were made — antlers of the reindeer or, less often, of the stag. Antlers must have possessed an especial power or sacramental meaning: somewhat like the horn of the bison in the raised left hand of the Venus of Laussel.

It is certainly not by chance that, in the early Persian ceramics of the fourth millennium B.C., the curved horns of the ibex overwhelm the whole space, while the body of the animal is represented only in miniature and in an abstract and simplified form.

219

The antlers of a copper stag, found in a pre-Hittite grave of the third millennium B.C. at Alaja Hüyük (Anatolia), were not only formed with the greatest care but even coated with silver. The Y-formed socle on which this animal stands also appears to be formed like an antler fork (Arik, 1941, p. 27).

That antlers, particularly forked antlers, had significance exceptionally early is also shown by Okladnikov's discovery in 1938 of the Mousterian tomb of a child in Teshik-Tash, a stone age cave in Soviet Uzbekistan (Movius, 1953). The skeleton of a Neanderthal child was excavated together with "a series of horns of the Siberian mountain goat . . . in all a total of five (possibly six) pairs of these horns found in association with the burial. They delimited a roughly circular area within which this skull and a portion of the other bones of the skeleton were lying. . . . The horns were all those of large individuals. One pair was firmly joined together 'like a wishbone.' . . . A second pair were conspicuous by their large size. . . . Although these had come apart and were lying more or less horizontally, their position clearly indicated that once they had been either upright, or slightly inclined inward, and fastened together like a fork" (pp. 25–26).

This Mousterian burial is striking in that many pairs of horns are arranged in a circle. They had been cut off close to the skull so that a V-form resulted (Movius, pl. V) with a natural hole in the center. They stood partly inclined or almost vertical in the ground, displaying their V-form upwards. Whether we have here, in the Mousterian period, an early version of the *bâton de commandement* of Aurignacian times may be left to individual opinion. What is curious is the use of the same material and an essential germ of the later form.

On the significance of the pierced staff

It is perfectly possible that some T-shaped pierced staves were used as arrow straighteners or, among the Eskimos, as a kind of necktie; but, without question, perforated staves —very slender and delicately formed, engraved with symbolic representations —were ritual instruments, just as the ritual mace heads in Predynastic Egypt and in Sumer.

231, 153

We shall return to the androgynous content of their form, but here we may note an indirect hint of their significance. The Laplander's drum, which itself had a cosmic significance, was made to sound by means of an instrument that had nothing in common with a normal drumstick. It was shaped like a *bâton de commandement* "made of a Raindeer's Horn, branching out like a Fork. . . . With this Hammer they beat the Drum, not so much to make a Noise, but thereby to put the Ring, laid upon the Skin, into motion, so as to pass over the Pictures, till they are satisfied in what they look for. . . . The instrument made of bone, wherewith they beat the Drum, is about six Inches long, of the Thickness of a little Finger, resembling the Latin 'T.' The Laplanders use this Drum upon divers Occasions, and pretend to do great Matters by the help of it; which makes them have it in great Esteem, and keep it with much Reverence" (Scheffer, tr. 1704, p. 137).

154

This of course refers to shamanistic practices, including trances and states of ecstasy, which were induced in times of need: to predict the outcome of a hunt, to cure an illness, to bring success, to cause disaster. "After the Drum-beater has done beating he falls on the Ground with Drum, which he lays on his Head, as you see in the following Posture. . . . In the mean while all these present, both Men and Women, continue their Singing without Intermission, till the Drum-beater be awakened from his Sleep; to put him in mind, of what is desired to be known" (p. 144).

FERTILITY SYMBOLS

While there may be some doubt about interpreting cupules and dots as fertility symbols, none is possible in the case of direct representations of sexual organs. The vulva and phallus, like the hand, were carefully depicted either singly or together with other related symbols, especially in the Aurignacian-Perigordian age. Here, too, the part stood for the whole. They were an obvious symbolic expression of the desire for the perpetuation of the species. No distinction was made in this context between man and animal. To increase and multiply was necessary for the continuation of the human race and for the continuation of the various animal species. In primeval times old age scarcely existed. The average span of life in the Aurignacian-Perigordian and Magdalenian eras was about twenty years, as H. Vallois, of the Musée de l'Homme (Paris), has deduced from the skeletons found in burial places.

174, 440

The vulva, as the organ of reproduction par excellence, is the dominant symbol, together with numerous Aurignacian-Perigordian female figurines.

475

The phallus, on the other hand, appears rarely, as do any male figures. The beautiful figure of a young man from Laussel remains unique.

214

An even rarer symbol is the independent female breast shown surrounded by dots or in relation to a scene, as in the sanctuary of Le Combel, at Pech-Merle.

VULVA

Ever and again in prehistory we are confronted by an interlocking chain of phenomena, and we are forced once more to realize what violence is done to certain representations by isolating them from their natural context. Yet, as a result of an education based almost wholly upon analysis, it seems scarcely possible to conceive any other method of gaining insight into complex phenomena apart from that of separation and isolation. The vulva is part of the whole complex of fertility symbols. It is seldom found alone; generally it is combined with other symbols, whose meaning is similar to that of the cupules, and with the animals whose increase is desired.

The female figure as cult symbol

The vulva obviously had a ritual significance, for in the Magdalenian period it is engraved — one might say branded — as a clear-cut triangle upon female figures which are otherwise almost naturalistic. This started a tradition, which reappears in the figurines of the fifth and fourth millenniums in Mesopotamia and elsewhere, referring back to prehistoric times.

107. LAUSSEL (*Dordogne*): *Detail of the Venus of Laussel*

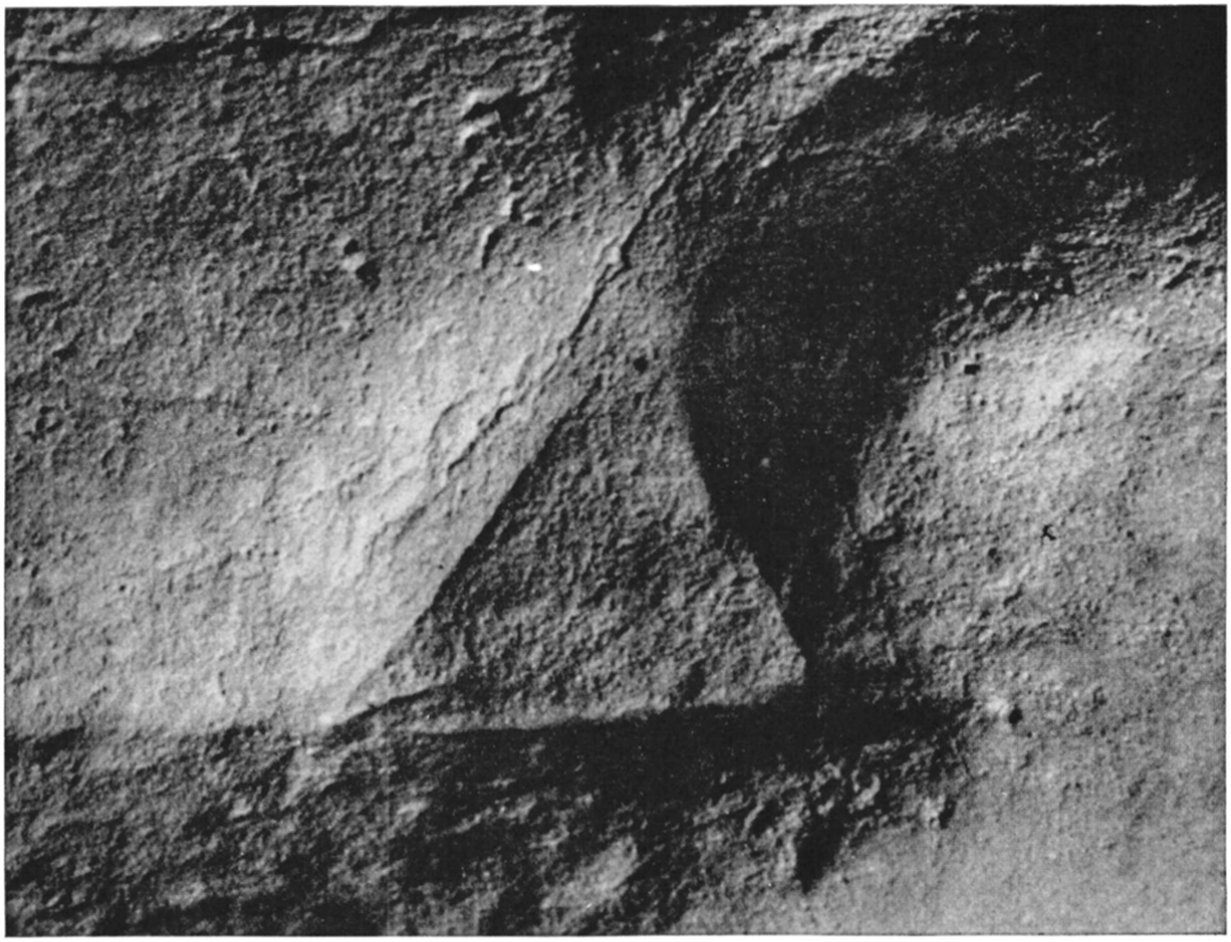
473, 270 col

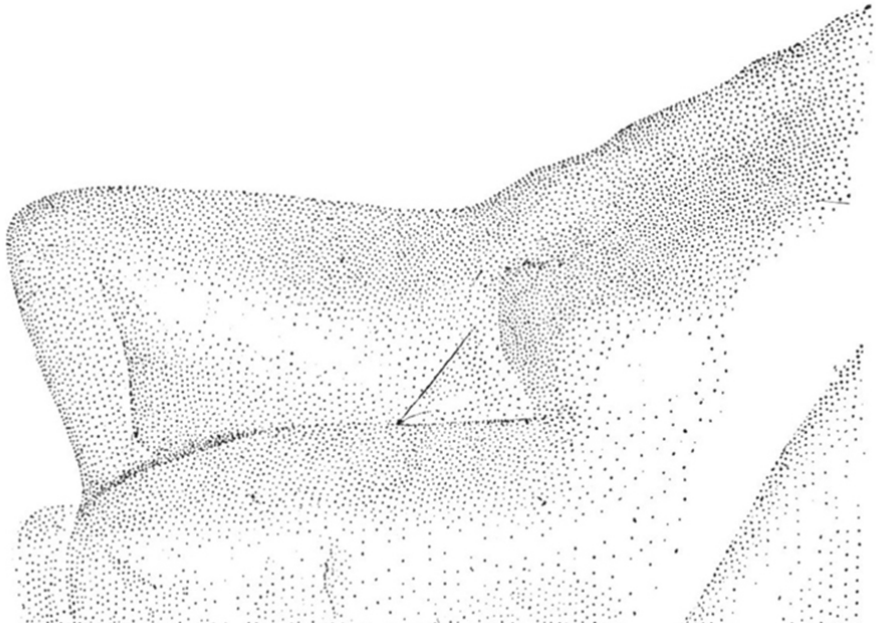
This can raise a question about the early relief we call the Venus of Laussel. Which aspects of this figure have been disregarded, which have been strongly emphasized?

above

Those parts of the body to which no value was attached, such as the head and certain limbs, or parts of them, are barely indicated. This is pushed so far that, while the figure's right arm is modeled with great tenderness, almost in the round, the left arm is far smaller and even looks atrophied. The right arm raises a bison's horn, itself linked

with strength and fertility. The breasts are protuberant; the pelvic area is still more so. Only after one notes these details does the extraordinarily sensitive modeling of the Venus of Laussel become apparent.





108. LA MAGDELEINE (*Tarn*): *Detail of engraved female figure. With drawing of lower torso*

174

All interest is concentrated upon the harmonious relationship of the rounded curve of the thighs and the rounded curve of the abdomen. Between the thighs appears the spherical triangle of the *mons veneris*. The hollow of the navel is accentuated. The left hand, which is merely engraved in outline, almost seems to sink into the abdomen. Ritualistic demands and a capacity to give them artistic and expressive form are here combined.

This stress on the female sexual center can be found also in later Magdalenian reliefs, though without such perfect integration into an artistic whole. The vulva in these instances is incised upon the almost naturalistic human body as an abstract, cult triangle.

175, **481**, **482**

One of the two reclining female figures in the small cave of La Magdeleine (Tarn) has a vulva engraved in this way. Its form is made even more striking by the wonderfully relaxed pose of the body and the delicate modeling of the legs. The discoverer, H. Bessac, told me that he saw the female figure (1952) sunk in the rock only after his eye had been caught by the deeply incised vulva triangle. After this that he was able to discover a second female figure on the opposite wall as well as a horse and a bison.

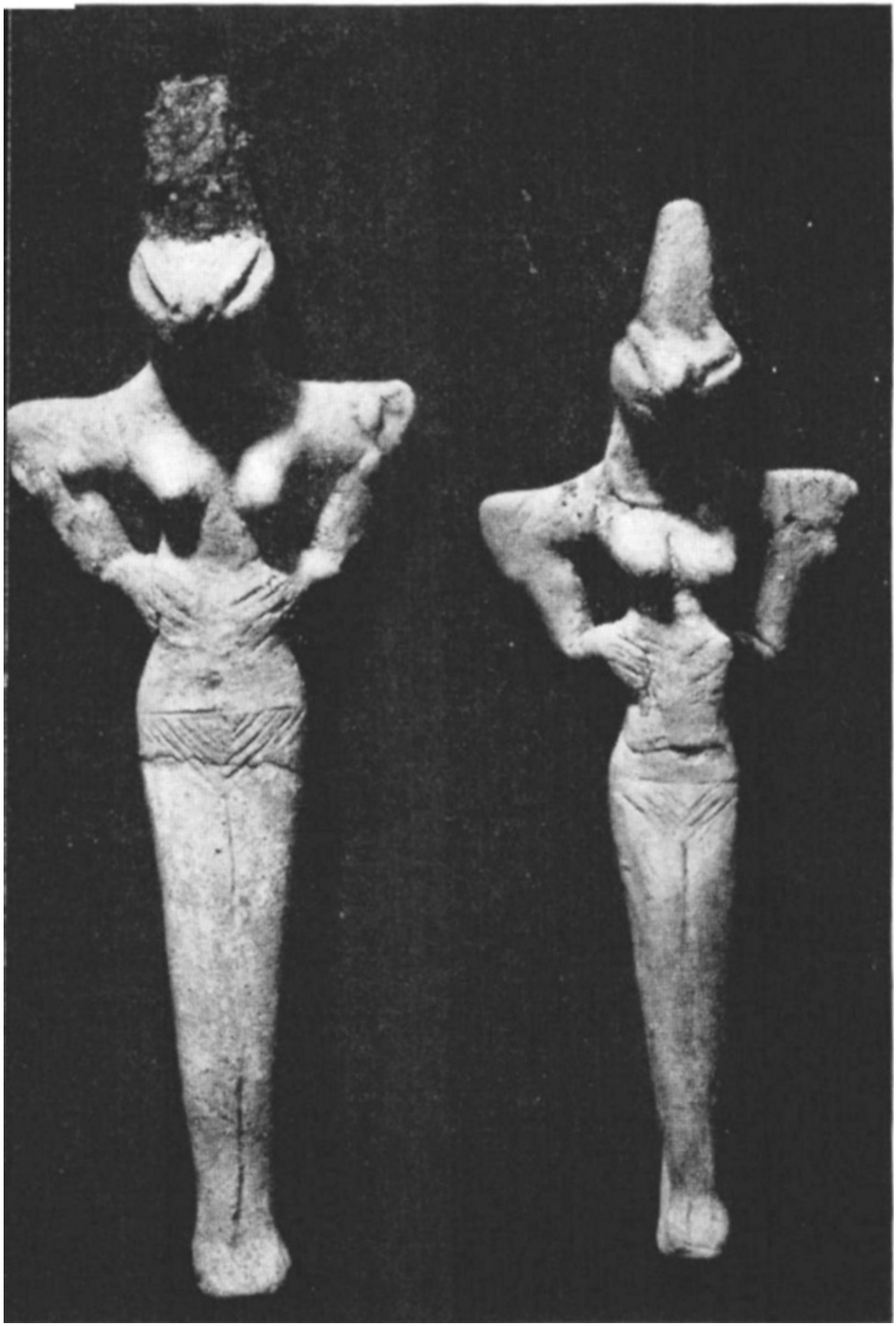
The three famous engraved Venuses of Angles-sur-Anglin (Vienne), which also belong to the Middle Magdalenian period, present a similar situation. Here, too, the symbolic vulva triangle is deeply engraved, in contrast to the full modeling of the body forms: so far as can be ascertained from reproductions, at any rate, the writer not having been permitted to see the figures *in situ*.

This frieze is most interesting because of the very large dimensions of the female figures, even though they do not attain the great sculptural qualities of the Venus of Laussel nor the beautiful repose of those at La Magdeleine.

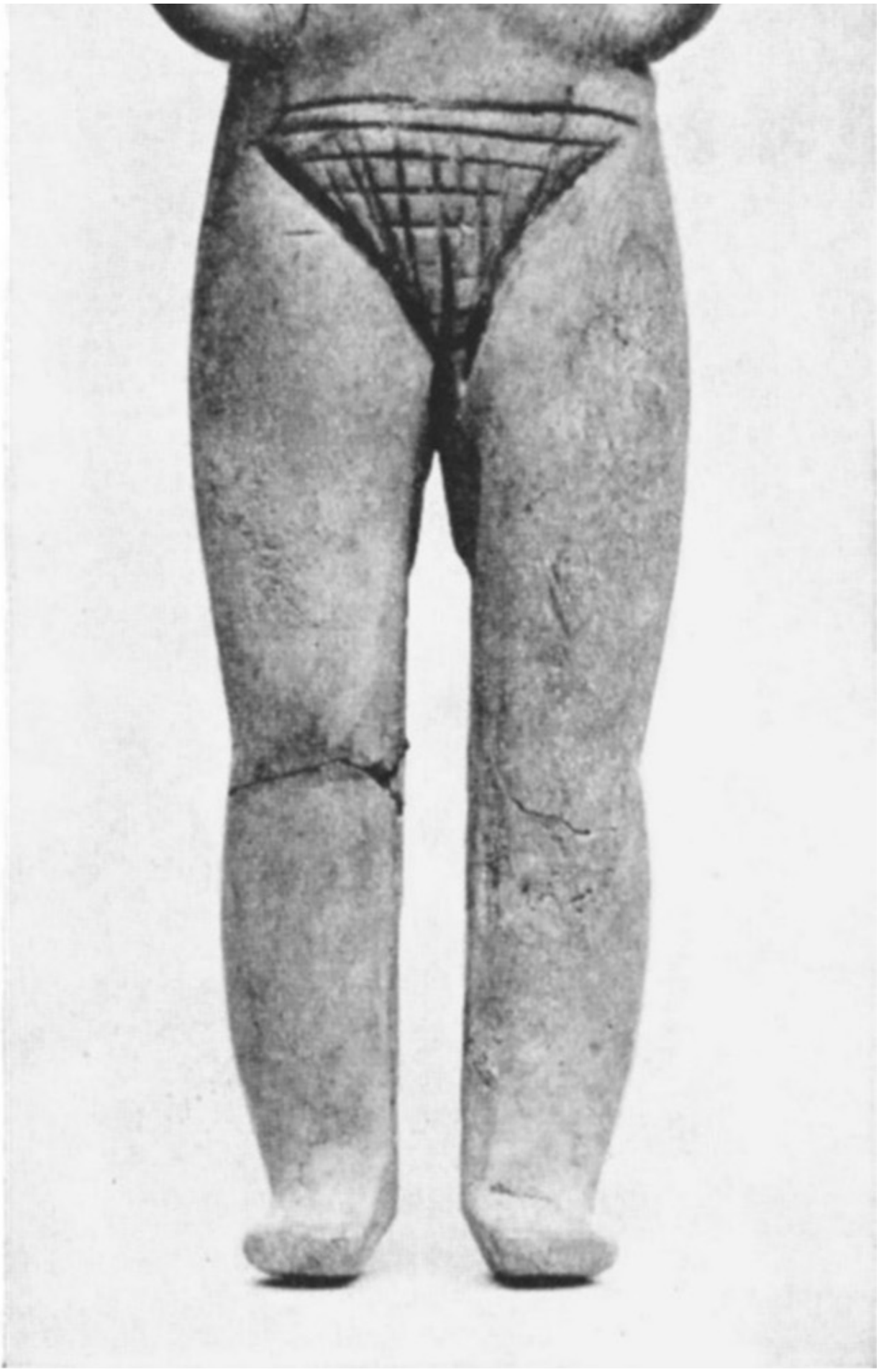
The discoverers of the frieze with its three Venuses —one in profile, one three-quarter view, and the third full face — stated in a first report: “The upper part of the body had never been represented, and the feet are also missing. . . . All emphasis is placed on the genital regions: the slit of the vulva is very pronounced in the second

Venus, the pubic triangle is heavily accentuated in all three, and the inguinal folds are indicated by a deep cleft" (Saint-Mathurin and Garrod, 1952, p. 418).

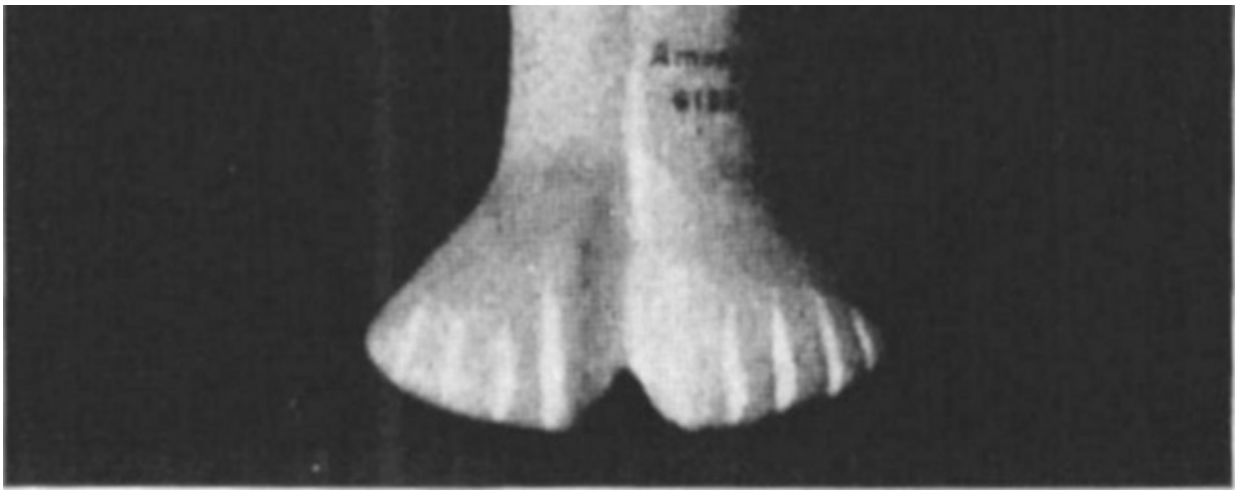
In the space of this Middle Magdalenian frieze, which had been completely buried under a stratum of the final Magdalenian period, it would have been certainly possible to depict an entire female figure, for the first Venus from breast to legs measures 120 centimeters. Such dimensions are unusually large for representations of the human body in prehistoric times. Had there been a need to represent the entire body, it could easily have been done in the space available. But apparently no such need was felt, and so only the abdomen, the pelvic area, and the vulva have been carved. The entire figure was not important, but only the fragment which stood for the whole.



UR (*Mesopotamia*): *Bird-headed clay lines, fourth millennium* B.C.



110. EGYPT, *Badarian culture: Clay figure of a woman*



111. CYCLADES (*Greece*): *Female idol of marble*

In the immensity of time from the brutally accentuated sexual organs in some Venus figurines of the Aurignacian period (e.g., the Venus of Willendorf) to the refined art of the Magdalenian period, the iconographic principle of the representation of the human body remained the same.

All female figures throughout this very long period of time symbolized the concept of fertility. In a more general way, this concept is expressed simply by the vulva, which implies both human and animal fertility.

The practice of engraving the vulva as an abstract symbol upon almost naturalistic female figures was the origin of a very long-lived tradition, which lasted from the Middle Magdalenian to the Cycladic age and was the forerunner of the Greek development. Three examples may be cited:

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In the "Figure of a Woman, Badarian Culture" — as the British Museum labels this Predynastic Egyptian statuette (no. 59,468) — the only part elaborated is the sexual triangle, which is not only extremely large in comparison to the rest of the figure but is further emphasized by crisscross hatching.

The terra-cotta figurines in the University Museum (Philadelphia), which come from Ur, in Mesopotamia (ca. end of 4th millennium B.C.), have birds' heads, like the oldest figures on the ceiling of the Hall of Hieroglyphs at Pech-Merle. They are slender, with raised shoulders and breasts, and their lines have a certain sophisticated courtliness. But, here again, little care has been expended on their hands or feet, though the sexual triangle, superimposed over a kind of girdle around their loins, is exaggerated in size and again emphasized by hatching.

The third example is one of the marble idols from the Cyclades, so well known to us. It is headless, the body merely shown in outline. The sexual triangle alone is sharply and precisely engraved.

That a tradition should persist through so many millenniums and occur in so many centers of culture surely indicates that these female figures were, from the outset, not intended as simple representations of the female body but were cult objects or idols, as archaeologists have called the numerous Cycladic figurines.

The earliest figures drawn in the damp clay of the caverns have a bond connecting them to Grecian civilization, which stands outside the shadows of prehistory. What little can be set down regarding the precise meaning of these figures in each culture implies that all were manifestations of fecundity, of the source of all life, of the Great Earth Mother, bearing the vulva triangle as her sacred symbol.

We are here solely concerned with the visible optical recording of rites and symbols. This makes us all the more grateful to those scholars who have labored to lift the veil from early myths and religions, even if only briefly.

Mircea Eliade showed how the enlarged symbol of the vulva became the *réalité cosmique:* "The ritual significance of the caverns, of which there has been evidence since primeval times, might also be interpreted as a mystical return to the 'Mother'. . . . Archaic intuitions of this kind die hard. We have seen that the word *delph* (uterus) survived in the name of one of the holiest places in Greece, Delphi. . . . Pausanias (II, 21, 1) speaks of a place in Argos which was called Delta and was regarded as the shrine of Demeter. Fick and Eisler have interpreted the triangle (delta) as the 'vulva.' . . . We know that in Greece the delta was the symbol for woman. The Pythagoreans held the triangle to be the *Urgestalt*, not only because of its perfect form, but also because it was the archetype of universal fecundity" (Eliade, 1956, pp. 42, 43).

The connection between the vulva and the cosmos became even more closely interlocked in the first high civilizations. "The sacred rivers of Mesopotamia were believed to have their source in the generative organ of the Great Goddess. Further, the source of these rivers was regarded as the earth's vagina" (p. 42).

The vulva as cult symbol

The vulva as the fragment which represents the totality — the part standing for the whole — first appeared in the Aurignacian-Perigordian period. Its representation varied from crudely naturalistic to signs, which grow more and more abstract until their meaning can no longer be determined with any certainty. In the Aurignacian period, the vulva (like the hand) was depicted both singly and in groups as well as in combination with cupules, animals, or both.

183

One quite isolated vulva sign is deeply incised upon a smooth but irregularly shaped stone from La Ferrassie in the museum at Les Eyzies (22 x 22 cm.). It is assigned by Peyrony (1934, p. 68) to the late Aurignacian period.

139

In general, however, the symbol of the vulva appears in combination with animals or with other signs, especially with cupules, whose meaning is so closely akin to their own. On a broken block from the Abri Cellier, Sergeac, near Les Eyzies, there are three balloon-shaped vulva signs in association with a deep cupule just as large as they are.

184

Similarly, on another stone from La Ferrassie, vulvas and several small cupules are in association, although here the sexual triangle has been greatly elongated and is variously oriented. The animals associated with these signs are so finely engraved, and so small in proportion to them, that it took Peyrony's keen eye to detect them at all. He believed them to be a pair of red deer, one following the other (p. 68). They cannot be seen in our drawing.

No witnesses exist to inform us of the exact significance of these few stone fragments with their various symbols, cupules, and animals. The presentiment that these stones played some part in ritual ceremonies is, however, supported by a tradition which surrounds similar representations today in a tribe of South American Indians subjected to hardly any missionary influences.

185

In the region of the Chimane Indians, in a valley near the Marique River below the eastern Cordilleras of Bolivia, members of the twenty-fourth Frobenius Institute Expedition found a grouping of stone blocks. Fourteen of them, after they had been freed from their covering of moss and creepers, showed deeply incised engravings, though much weather-worn (Hissink, 1955, p. 62).

134

The blocks lay in their original positions on a mountain pass. Involuntarily the position of the fertility sanctuary of Laussel comes to mind, with its blocks carved with the Venus and similar representations. This South American site had few, though interesting, representations of the human figure, but a "preponderant number of female sexual symbols" (p. 62). The human figures were "always on the highest point of the rocks under which numerous vulva signs were grouped, some of them very striking in their size. The largest of them measured 37 X 40 cm. and its outline was 10 cms. deep" (p. 64).

186

Obviously nothing definite can be said about their date. But these blocks are so similar in form and technique to the deeply engraved Middle Aurignacian vulva (22 x 22 cm.) that they could as well have been found at La Ferrassie.

The most interesting thing about these stones is the tradition that the Chimane Indians associate with them. The blocks lie close to a source of rock salt, protected as a disused

ritual place where the ancestors of the Chimane Indians had danced "when seeking the salt, decorated with feathers, wearing masks, and carrying whirlers" (p. 66).

Among the Chimane, salt is closely related to fertility and human procreation. Fetching the salt was tied up with ritual actions and ceremonies. "This took place at the period of sowing . . . and was possibly accompanied by fertility rites" (p. 68).

"Salt has a deep significance in the existence of these Indians. It is synonymous with life and the substance of life. . . . The leading idea [of the ritual place] is closely linked with salt as the symbol of life and the regular renewal of human life" (p. 68).

In these Indian symbols, therefore, meaning centers upon the renewal of life and the desire for fertility.

In prehistory a connection between representations of the human figure and of isolated sexual symbols is seldom apparent. On the other hand, there is undoubtedly a close relation between animals and the female sexual symbol.

186

An Aurignacian stone block from La Ferrassie, with the top broken off, shows a combination of several fertility signs with an animal. All that has survived is the rough outline of the lower part of a male animal: the lightly curved line of the abdomen and deeply engraved hind legs remain to the left, but much of the forelegs had been destroyed. Again, various fertility symbols are strongly emphasized. Cupules and a balloon-shaped vulva are freely disposed below the animal. A row of cupules leads to the animal's male organ. Another row of cupules terminates in the vulva symbol. A third row of cupules is associated with a U-shaped sign on the left. Peyrony regards it as certain that all these signs had symbolic meaning for primeval man (Peyrony, 1934, p. 78).

It is as if the combination of these various signs was intended to give still more power to the urgent desire: "Increase and multiply."

Head and vulva

187

A pleasing Aurignacian engraving from the Abri Cellier, Sergeac (Dordogne), combines a vulva with the head of a horse, drawn with a simple yet generous contour. Their interrelationship is emphasized by the parallelism of the outlines of the vulva and the head. In addition, they are linked by a deeply incised S-shaped line which in itself has nothing to do with the design. The fact that the fertility symbol is as big as the horse's head stresses still further the intention of the engraving.

188

The demonic head of La Ferrassie: One of the more uncommon finds at La Ferrassie was the head of an animal demon of the Middle Aurignacian period. Peyrony says without hesitation: "This beast's head can bear no possible resemblance to any creature living at that time" (1934, p. 62). He also noted the *cassures de base* (broken-off surface of the base) and believed that the head had been part of a statue. But free-standing statues of such a size were unknown in prehistoric times. Standing figures or statues in the round separated from the virgin rock were developed in Greece as an outcome of a new awareness of the human body.

The roughly modeled clay dummies of animals, without heads and without detailing, such as the bear found by Norbert Casteret in the cave of Montespan in the northern Pyrenees, have nothing to do with sculpture in the round. They were a basis for the hunters' sympathetic magic: draped in bearskins, they served as dummies at which spears were hurled. One of Leo Frobenius's team found, at a place of sacrifice of the Bamana, in French West Africa, the headless dummy of a leopard in the same crouching position as the bear dummy of Montespan (Frobenius, 1933, p. 83).

189, right

The head from La Ferrassie, on its roughly level base, has somewhat flattened features. The eyes are protuberant, the nostrils and mouth deeply incised, the chin merges into the base, and no distinguishing features can be recognized. A vulva sign is deeply engraved on the back of the head, similar to the solitary vulva from La Ferrassie, which is of the same period.

188

Confirmation that this head had never been part of a statue comes from a remote source. In American prehistoric times, the Indians of the Pacific Northwest, who lived on both sides of the Columbia River, developed an astoundingly elaborate stone sculpture in the round (Butler, 1957, pp. 158–65). This is exceedingly rare in the pre-Columbian art of North America. In the neighborhood of the Columbia River and its tributaries, there were found, among other things, heads of animal demons which were assigned to the late middle period of their stone age (about two thousand years ago). They have been described as follows:

"The Indians who have inhabited the Northwest within historic times have had no knowledge of the significance or of the makers of the stone sculpture. . . . One type of sculpture is particularly characteristic. It is represented by a number of nearly life-size heads, carved in the round, and frequently referred to as 'ape' or 'baboon' or 'dog' heads. The majority of them are in every respect sculptural masterpieces. While differing slightly in minor details, they closely adhere to a basic type. The proportions of the heads are long, deep, and narrow. The cranium is shallow; the eyes large, protruding ovals; the nose wide, convex, and terminating in spreading nostrils; and the mouth large, with full lips, and sometimes partially open. Below the mouth, the

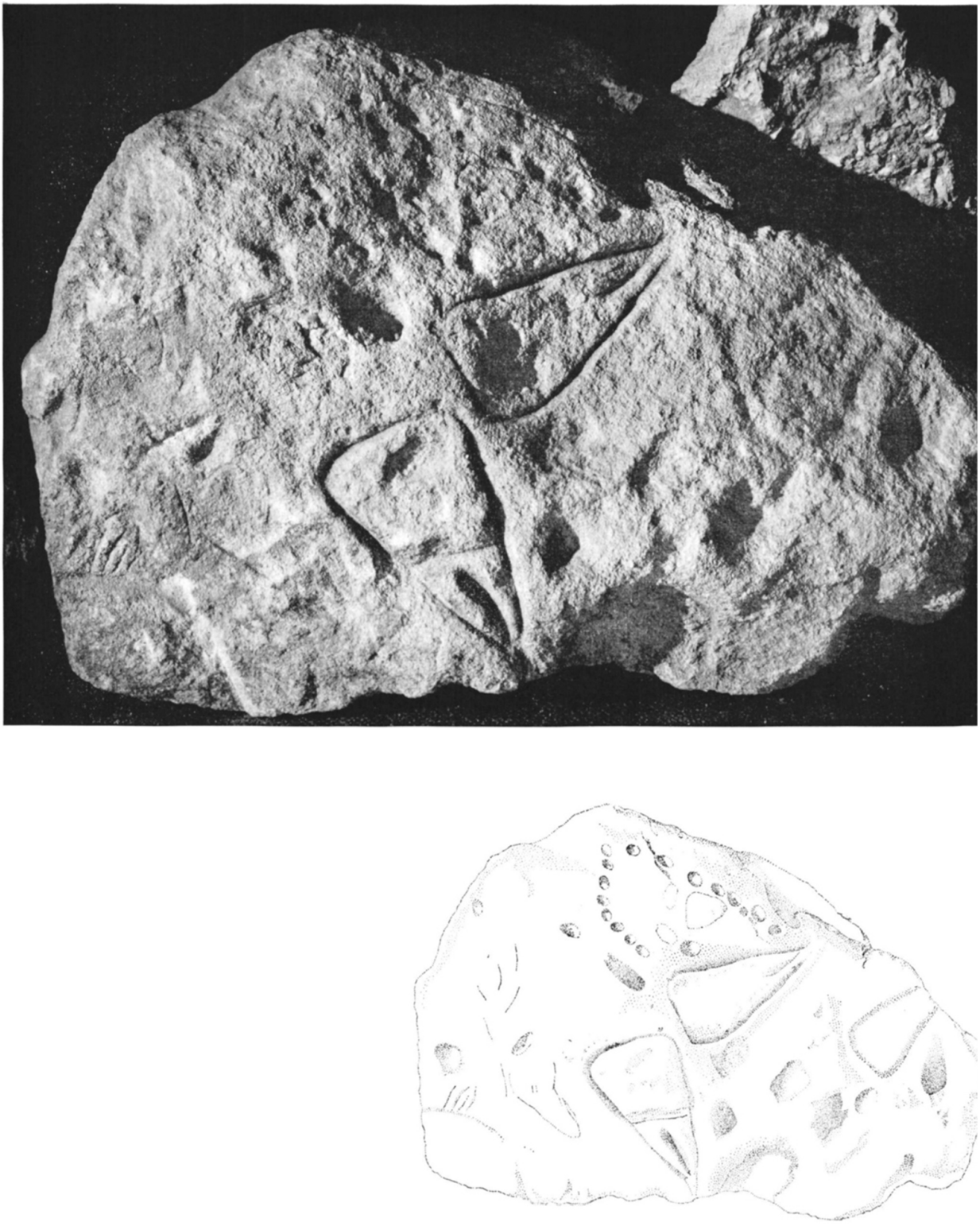
protruding face recedes sharply. . . . They were apparently never intended to be attached to any other carved form, and must be considered as sculptured heads *per se* . . .” (Wingert, 1952, pp. 10, 78).

189

This description would equally well fit the animal-demon head of La Ferrassie. The fact that this head, with its protruding eyes and indeterminate features, can be assigned to no known animal species definitely indicates a demonic significance. This is further stressed by the large vulva on the back of the head and clearly establishes its function: a symbol of fertility.

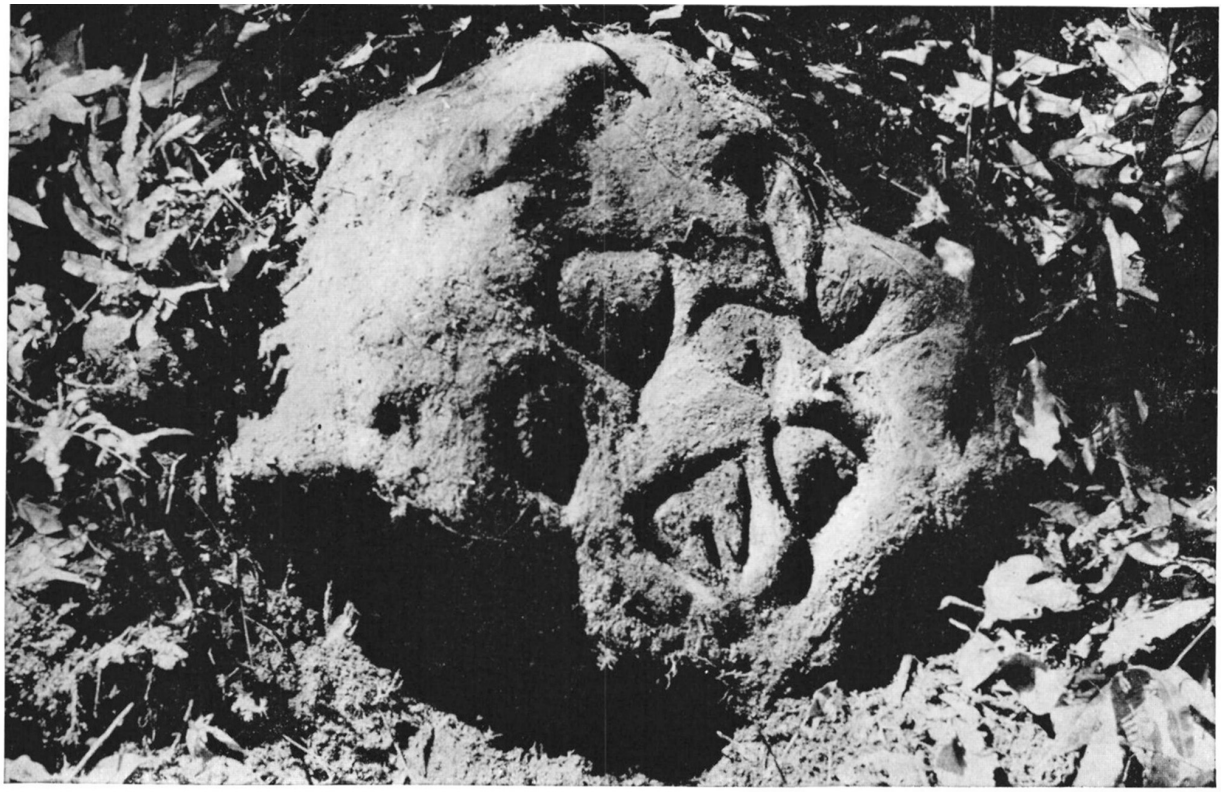
A similar shallow cranium, with large, unelaborated eye sockets and indeterminate features, is found in the “magician” of Lascaux, the *animal imaginaire* which seems to be driving the other animals before it. As the Abbé Lemozi told me, Jonathan Leakey considered the two lines which appear to spring from the creature’s head to be, not some kind of unicorn horns, but the last hairs of the tail of the giant bull. If this supposition is accepted, the resemblance to the La Ferrassie animal-demon head becomes even stronger, even though the “magician” dates from a later period; the accentuation of the creature’s pregnant condition further discloses a preoccupation with the idea of fertility.

112. LA FERRASSIE (*Dordogne*): *Aurignacian stone with large incised vulva*

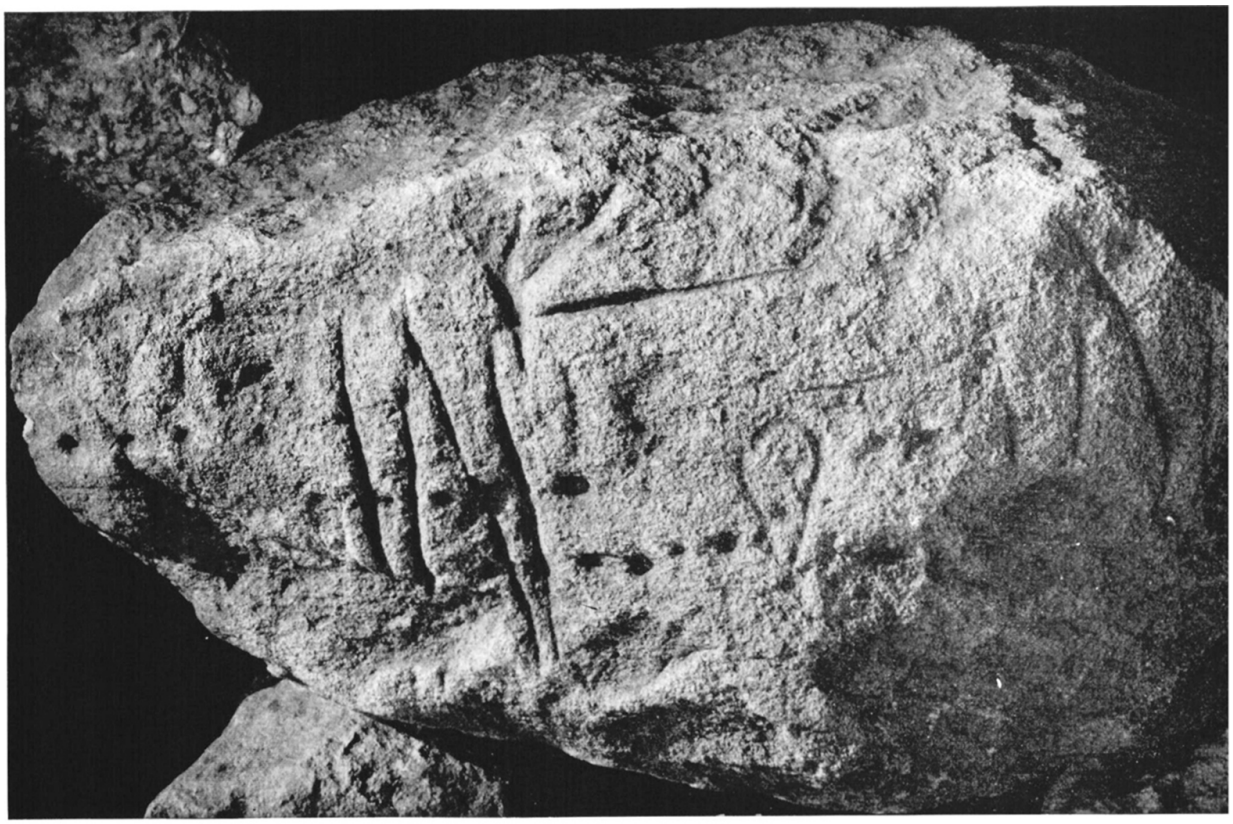


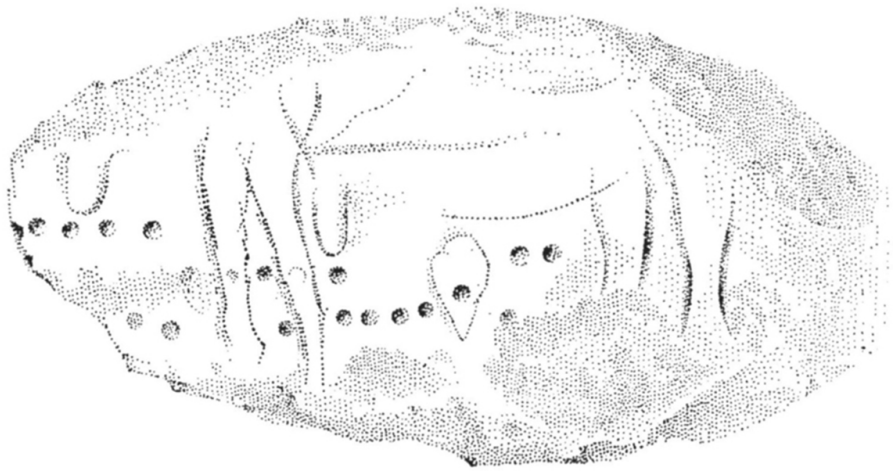
113. LA FERRASSIE: *Aurignacian stone with vulvas and small cupules. With drawing*

114. CHIMANE INDIANS (*Bolivia*): *Blocks with incised vulvas at a salt sanctuary*

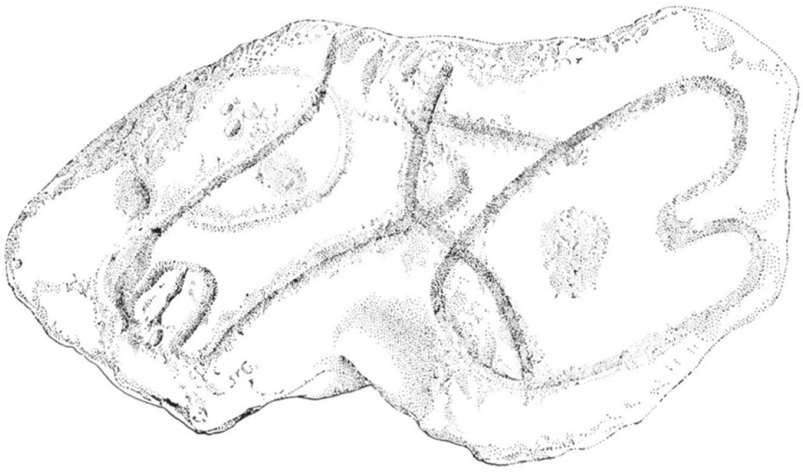


115. CHIMANE INDIANS: *One of the blocks from the salt sanctuary*



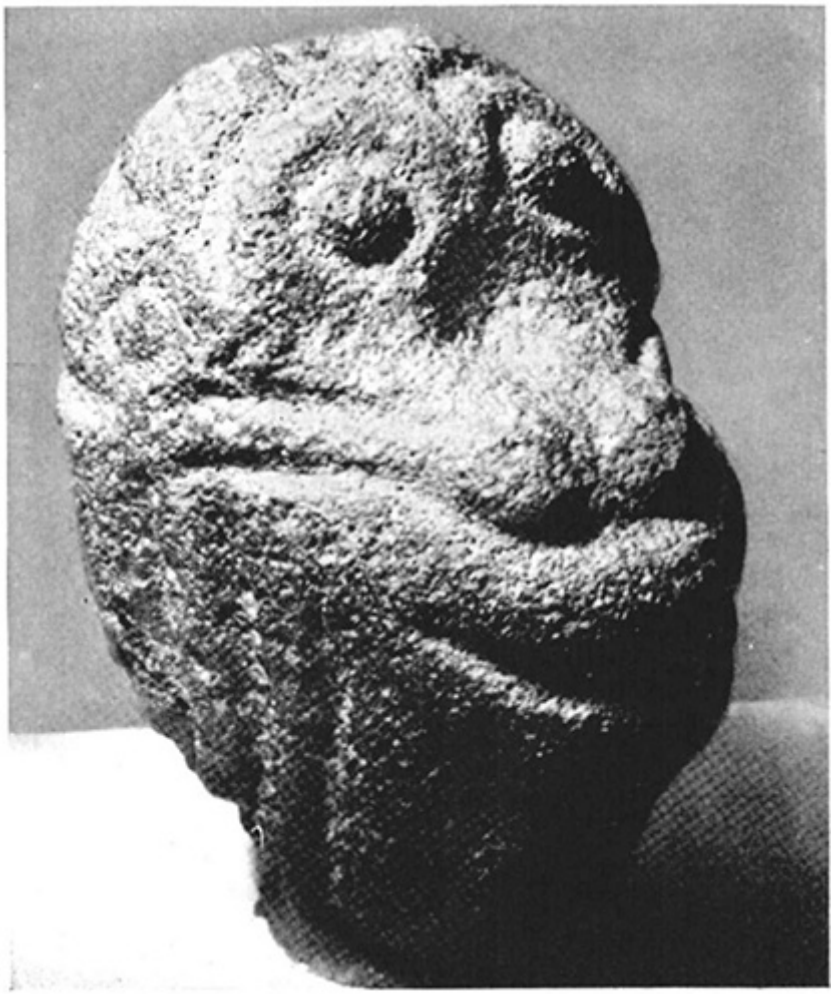


116. LA FERRASSIE: *Aurignacian stone block with several vulvas and an animal's hind and fore legs and phallus. With drawing*



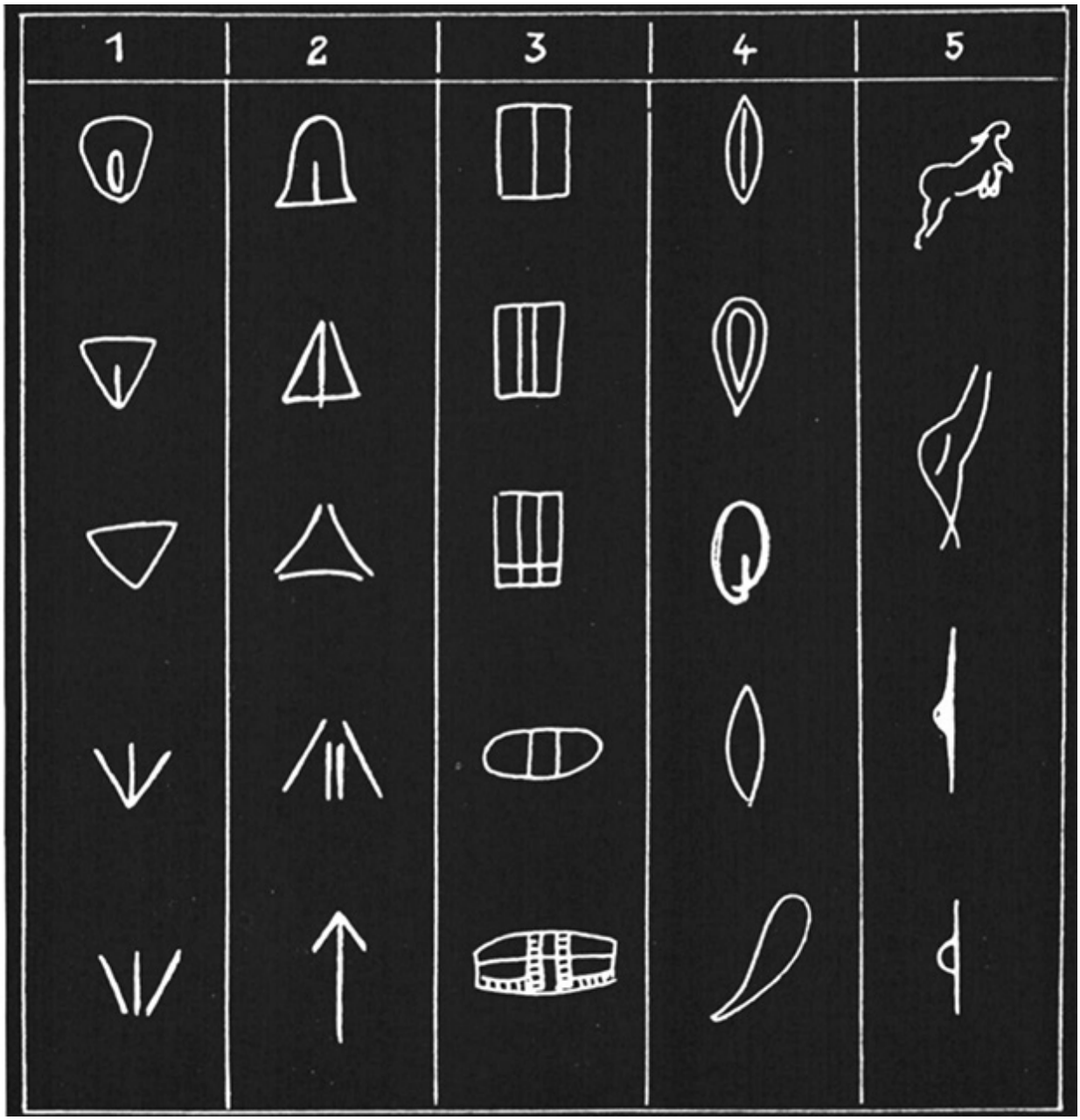
117. ABRI CELLIER (*Dordogne*): *Stone block incised with animal's head and vulva. With drawing*

118. LA FERRASSIE: *Stone block showing head of animal demon*, *Middle Aurignacian period*



119. PACIFIC NORTHWEST INDIANS: *Animal demon of stone, pre-Columbian*

120. LA FERRASSIE: *Reverse side of head of animal demon* (*fig. 118*), *showing vulva*



121. Abstract types of vulvas and female figure: 1, 2, *triangular; 3*, *scutiform;* 4, *oval; 5*, *claviform. From Leroi-Gourhan, 1958*

Abstract vulvas

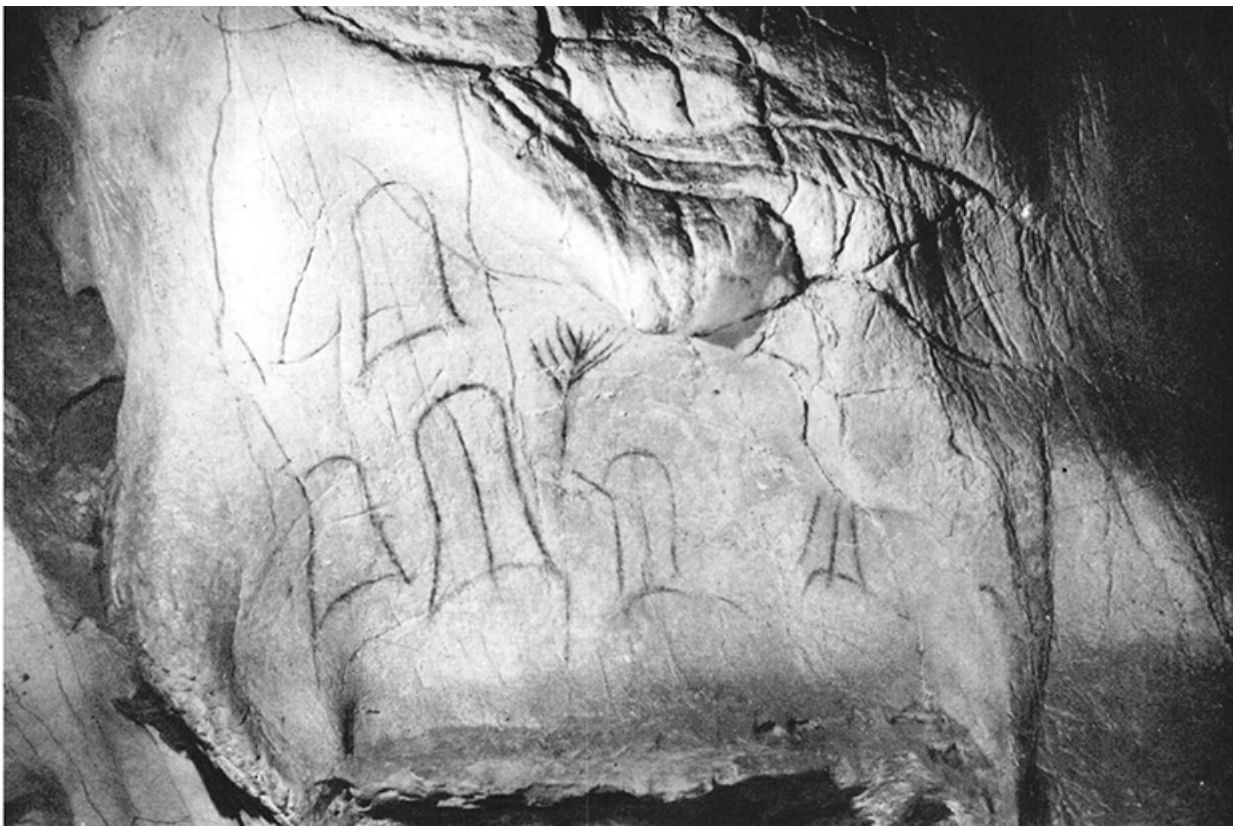
Representations of the vulva, and also the phallus, became increasingly subject to the process of abstraction during the Magdalenian period, passing to signs whose meaning cannot be definitely determined.

right

The degree to which the female organ of fertility and increase was venerated is perhaps more clearly displayed in the cavern of El Castillo than anywhere else. There, in a rock niche, are five bell-shaped signs. They have long been recognized as representing the vulva. They are red and very large (ca. 45 cm.) and are divided by a

short vertical stroke. Between them is an (80 cm.) upright black line, feathered at the end. This is, as Leroi-Gourhan suggests (1958, p. 386), most probably an abstract symbol for a phallus. Together with the three vulvas the group forms a composite symbol of fertility or, as Leroi-Gourhan puts it, a *couple de signes*.

The red female symbols and the single black male symbol are spectacularly situated within a slightly raised part of the so-called second vestibule of the cavern of El Castillo. Below the smoothened surface of the niche which they occupy is a small tablelike projection of the rock, beside which fall the folds of a curtainlike rock formation which could have been modeled by Lorenzo Bernini. If I am not mistaken, parts of this rock curtain show signs of having been rubbed smooth by long usage. In this dramatic setting the fertility symbols stand alone. Even with no knowledge of their meaning, this group of images in their carefully selected setting is highly impressive.



122. EL CASTILLO (*Santander*): *Rock niche containing five red vulva symbols and a black feathered shaft representing a phallus*

123. EL CASTILLO: *Detail of two red vulva symbols and black feathered shaft*

190

For Leroi-Gourhan the bell-like vulvas of El Castillo are but one of several different categories of abstract vulvas. His starting point is the sexual triangle with a clearly recognizable short dividing line, sometimes shown as three lines coming together without the enclosing horizontal line of the triangle. His second category starts with the bell-shaped figure and contains triangles in a reverse position. Another category consists of oval forms, representing the *orifice genital.* Leroi-Gourhan includes a parallel column showing the process of abstracting the female figure in profile (1958, p. 520).

199

The representation of the vulva as a diamond-shaped lozenge, often together with a fish as a phallic symbol, is an extremely widespread fertility symbol. It extends from primeval times into the high civilizations, though this does not necessarily imply an unbroken line of continuity.

below

In the works of a modern artist such as Joan Miró, this sign openly reappears as a completely neutral symbol, liberated from the moralistic taint that had clung to it over the last two millenniums.

124. JOAN MIRÓ: *Sculpture in plaster, 1948*

PHALLUS

There is a widespread belief that in primeval times the connection between conception and the sexual act was not recognized. Conception was believed to be brought about by

actions of the wind, by inhaling —in short, by the influences of external forces. This can lead to highly involved concepts such as the power of the fructifying word, *la parole fécondante.* Such are described by M. Griaule in his study of the Dongo tribe of West Africa (1948, pp. 166–68), who believe that every woman capable of childbearing carries in her womb a divine seed. Only when the god gives the word does the male sperm wind itself around the womb and give the divine seed its earthly form.

Knowledge or ignorance of the generative process has given rise to many differing opinions, especially in the context of the man-animal relation: totemism. Some understanding of this complicated problem can be gained from Elizabeth della Santa's account of its ramifications (1947, pp. 57–77).

Whether the ideas of conception in primeval times were simple or complex is beyond our knowledge. There are no proofs. On the other hand, representations of the phallus in Aurignacian and Magdalenian times cannot be overlooked, for they would seem to imply some knowledge of the connection between procreation and phallus.

Representations of male figures are extremely rare in comparison to those of females. This applies also to the symbol of the phallus. But, with the advent of the menhirs the phallus achieved monumental stature, though the meaning of these monoliths is not exclusively a phallic one.

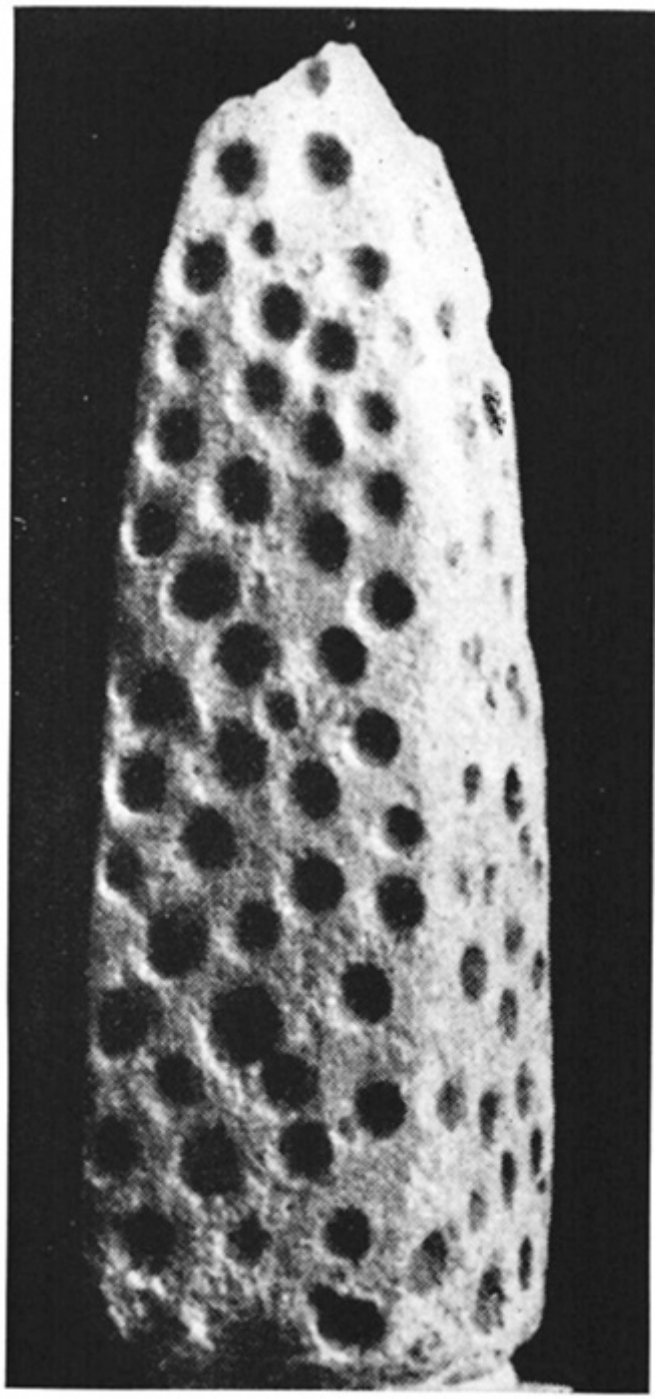
The phallus as cult symbol

Just as isolated representations of the vulva existed in the Aurignacian period, so also there were isolated engravings and sculptures of the phallus. J. G. Lalanne, in his excavation of Laussel (Dordogne), found a number of these, some of which were extremely realistic (1911, pp. 139–42).

270 col, 473, 239

The objects found there show that this sanctuary of Laussel, at the foot of an overhanging rock, must have been a fertility shrine. In addition to the Venus of Laussel with the bison's horn, several other smaller female figures were carved on the rocks, as well as a scene which has been interpreted by some as a birth, by others as a coitus. Then come various representations of the phallus, which point to a male fertility cult.

125 . LAUSSEL (*Dordogne*): *Aurignacian quadrangular stone block* (*15 cm.) in phallic shape*, *with cupules on a ll sides*



126. TARXIAN (*Malta*): *Neolithic quadrangular phallic cone* (*17 cm.*) *covered with cupules*

above

The association of cupules with the phallus occurs again and again. On one limestone block at Laussel, there is a conventionalized phallus surrounded by cupules, one of them much bigger than the others (Lalanne, 1911, fig. 98) . On another block, a phallus is drawn as though emerging directly from a cupule (ibid., fig. 99) . On a quadrangular phallic block 15 cm. high this association is even more evident. It has cupules on all its sides, and even on the base.

above

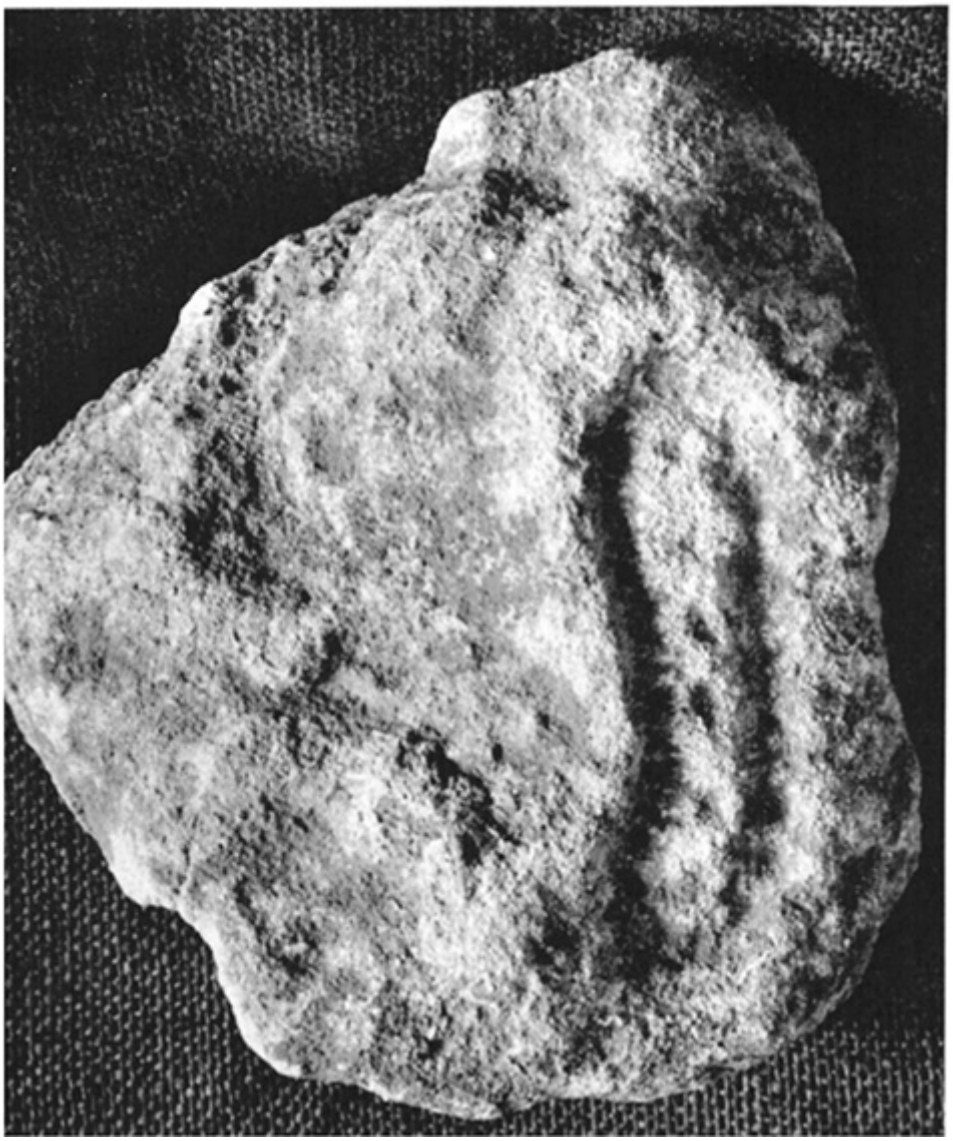
The persistence of the ritual custom of incising cupules upon stone phallic symbols up to the neolithic period is brought out by "a small votive cone of limestone in the form of a tall pyramid with a square base from the northeast apse in the entrance hall of [the temple of] Tarxian [Malta]. . . . This object is covered with irregular perforations. It was carefully pressed into the soil beneath a stone behind a large obese female idol" (Manneville, 1939, p. 897). This is only one of a number of different objects of a phallic character which were found in the same temple.

204

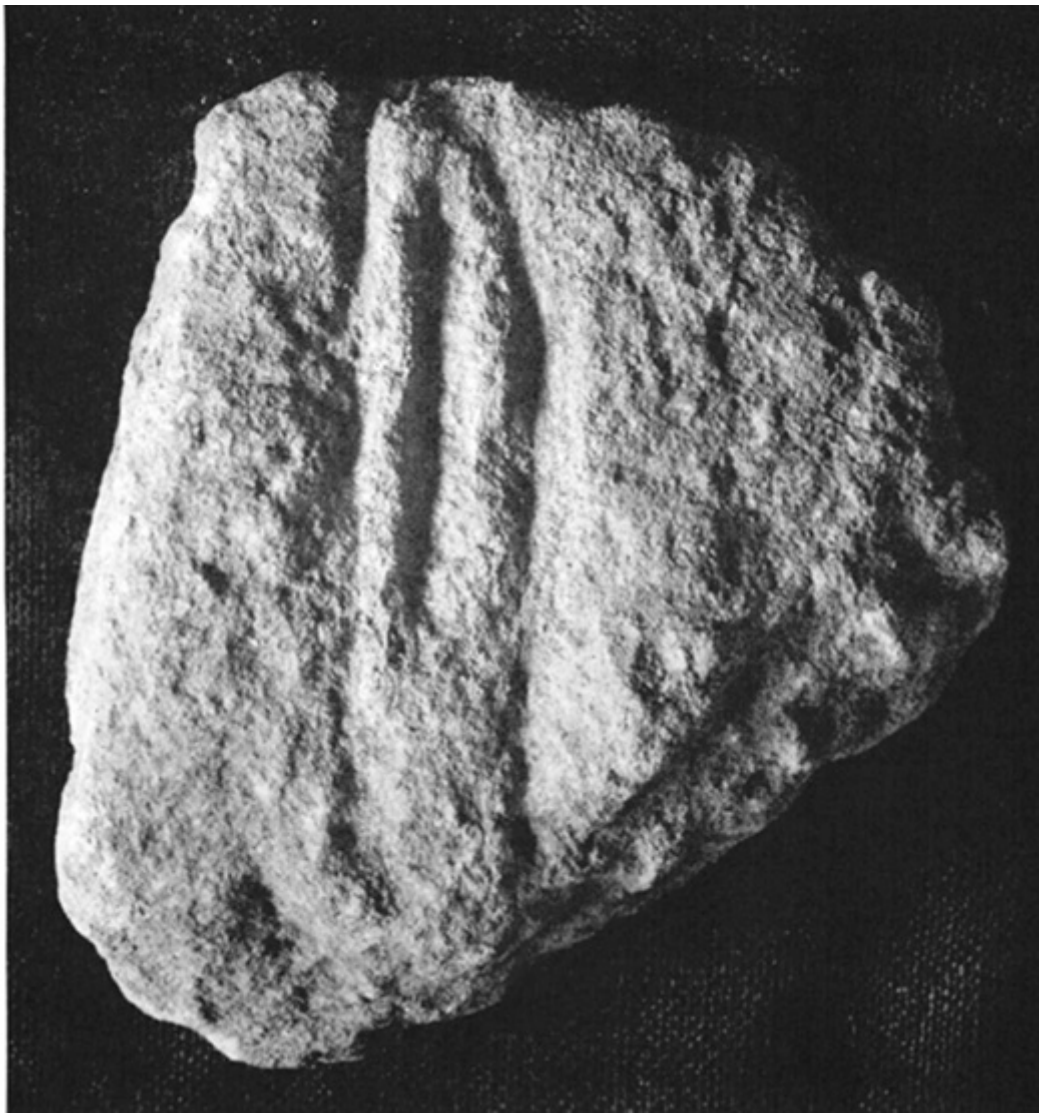
One is forcibly reminded of the large polished cupules on the ithyphallic statues of Min, showing the close relation between Egyptian symbols and those of prehistory.

below

The rock shelter of Laugerie Haute (Dordogne) was also a source of Aurignacian representations of the phallus. Among others one was hollowed out from a stone block with six cupules embedded in it. On another block, from the rock cavern of Laussel, a heavy line has been engraved lengthwise along a phallus. Ever and again such straight lines appear on representations of the heads of animals or of human bodies.



LAUGERIE HAUTE (*Dordogne*): *Aurignacian with phallus and six cupules*



128. LAUSSEL: *Aurignacian block with phallus incised with a straight line*

196

On the approach to the sanctuary of Le Combel (Pech-Merle) one encounters a stalagmite of extraordinary form, curved like the horn of a rhinoceros and about eighty centimeters high. The Abbé Lemozi discovered that this remarkable formation was covered with small indentations (*piquetages*) and that it also seemed to have become polished through long usage. He interpreted it as a phallus, and this appears very probable, especially as it is located at the entry to this fertility sanctuary.

129. LE COMBEL, PECH-MERLE (*Lot*): *Phallic stalagmite* (*80 cm.*) *pitted with small cupules*, *its surface worn smooth*

right

A Magdalenian pierced staff from the Gorge d'Enfer (Dordogne) is a clear indication of the existence of some kind of phallic cult. The two branches of the staff and most of the curve of the circular perforation have been preserved. They display a double phallus, each branch engraved with two wavy lines, a straight line, and two ovals.

Phallus, fish, and lozenge

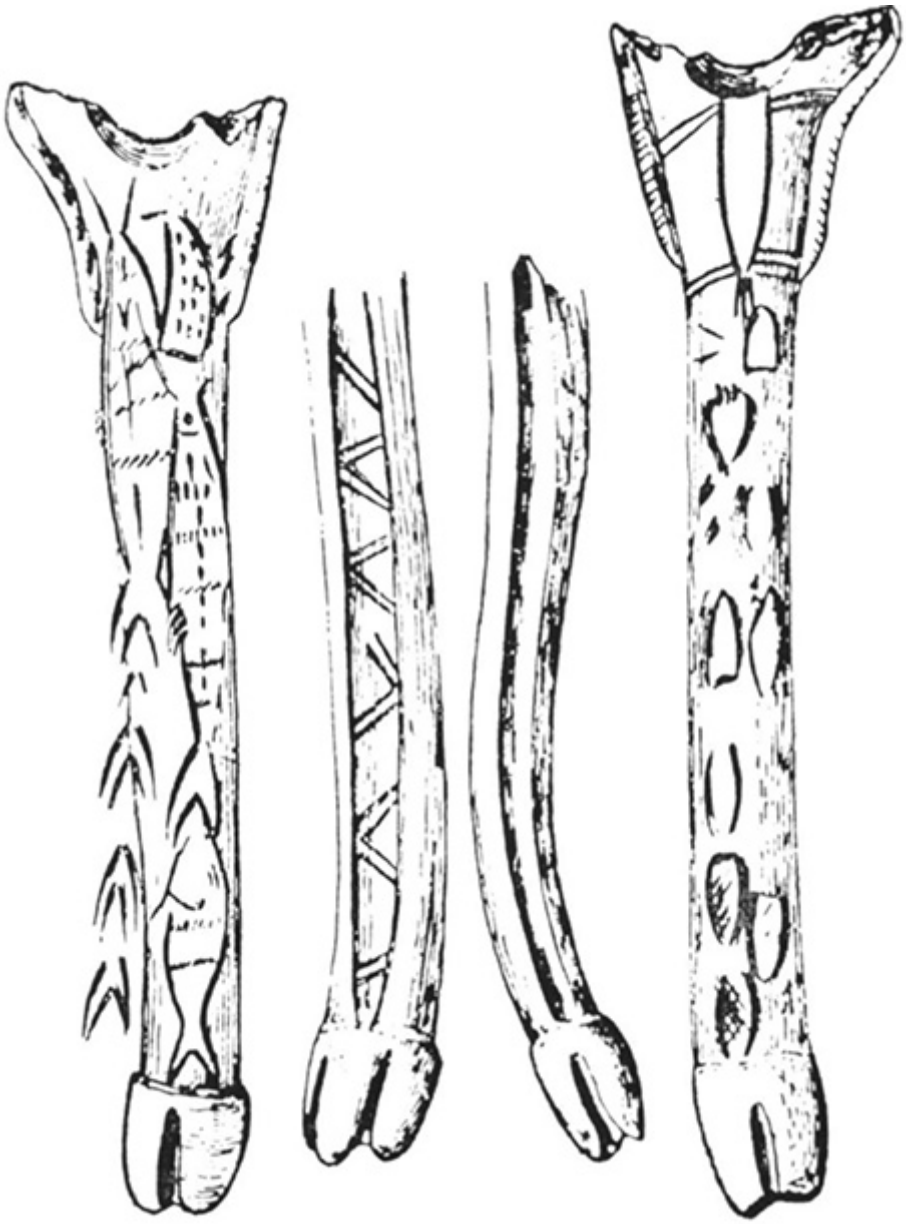
In 1927, H. Breuil and R. de Saint-Périer brought together numerous representations of fishes occurring on pierced staves. These provide a further insight into the well-nigh inexhaustible imagination of the Magdalenian period. They range from easily recognizable specimens to barely decipherable abstractions.

198

One staff, from Bruniquel (Tarn-et-Garonne), is shaped like a phallus. On one side it has three recognizable fish, on the other three sides abstract symbols. Along one side runs a long incised line, similar to that on a phallus from Laugerie Haute. The signs on the other sides are probably abstract symbols of the vulva. The staff ends in a four-lobed glans, perhaps denoting a double phallus. The other end is broken away, leaving only part of the perforation.

130. GORGE D'ENFER (*Dordogne*): *Branched head of pierced staff engraved as a double phallus*

What is the meaning of the juxtaposition of fishes and *bâtons de commandement* which occurs so frequently? "The fish is often an emblem of the phallus" (Hentze, 1*932,* p. 123). Phallus and fish combined make a stronger symbol of fecundity and procreation. In classical times this relationship was well known: Uranus spurted forth with his blood (= life-stream) both Aphrodite and the phallic fish at the same time (Dölger, 1922, p. 412).

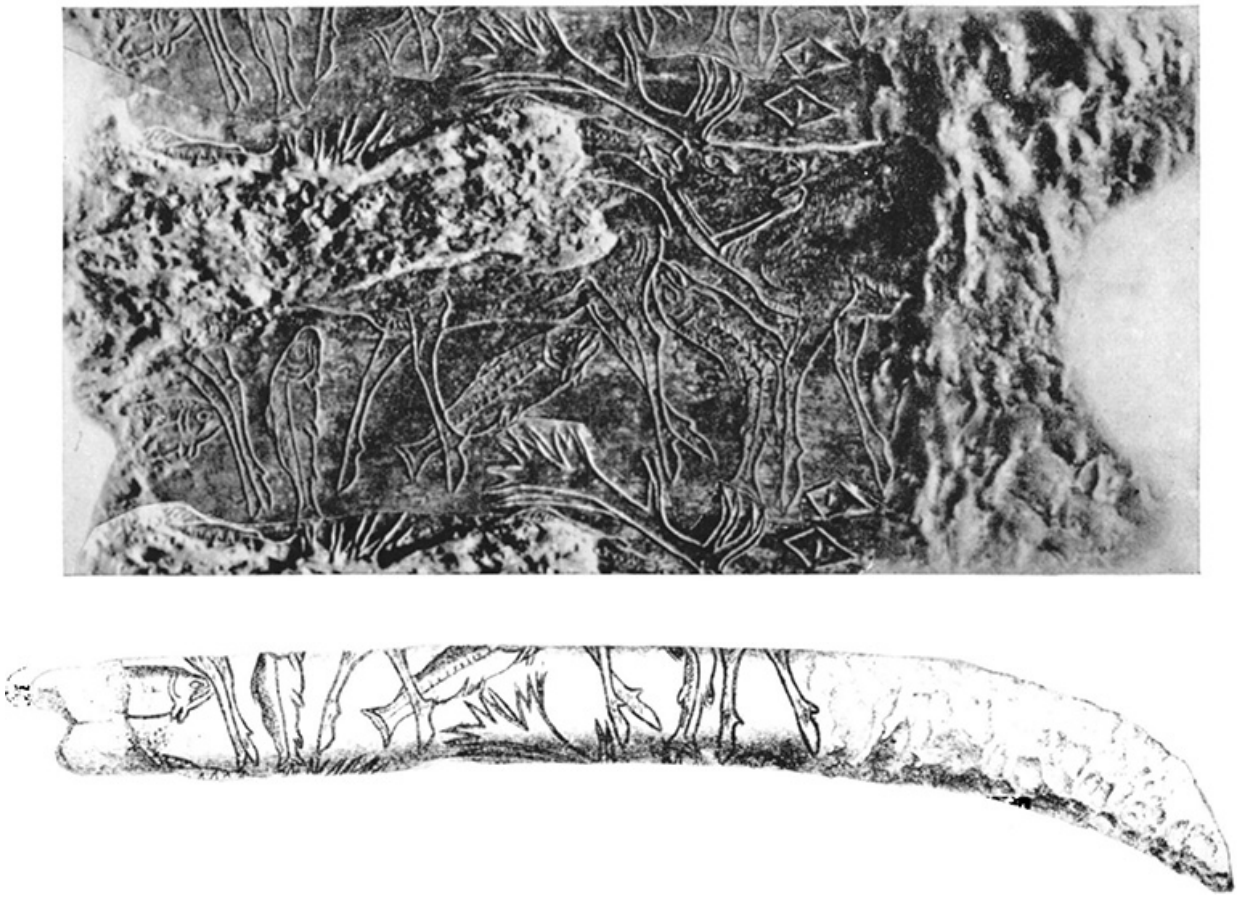


131. BRUNIQUEL (*Tarn-et-Garonne*): *Two pierced staves of phallic shape, engraved with fishes and vulva symbols. Drawing by Breuil*

right, **below**

Hentze traces this classic relationship backward and arrives at a composite symbol: namely, the juxtaposition of a fish, representing the phallus, and a diamond-shaped lozenge, representing the vulva. He turns to a Chinese funerary brick of the Han dynasty which presents a row of fishes before a series of rows of lozenges. He finds (as Dölger had observed) fishes and lozenges occurring together on numerous Mesopotamian cylinder seals. But the main thing is that he dared to trace this composite symbol of phallus and vulva back to the Magdalenian age. Taking a reindeer antler from Lorthet (Hautes-Pyrénées), he again shows the relationship of fishes and lozenges. These fish are "the most beautiful representations of salmon in quaternary art" (Breuil and Saint-Périer, 1927, p. 45). They are astonishingly lifelike, but this can scarcely be construed

as a genre painting depicting the salmon leaping up a stream crossed by reindeer. Hentze concurs in seeing it quite otherwise. In his view the fish have been deliberately placed between the hooves of the reindeer: "Two of the fish are clearly placed facing towards the genital organ. . . . Above and to the right one can perceive two symbols, rhomboid in form, which remind us strangely of the lozenges on the Chinese brick" (Hentze, 1932, p. 123). Hentze was referring to the extended or flattened-out drawing of this reindeer antler in which the lozenges appear to be above the reindeer. In reality, as a composite photograph of the rolled-out cast shows, they are quite close to the fish and, like them, between the hooves of the animals.



132. LORTHET (*Hautes-Pyrénées*): *Above, plaster cast of reindeer antler, rolled out to show both sides. Composite based on photo from Piètte, 1907. Below, details of leaping salmon, reindeer, and abstract vulvas engraved upon the same antler. Drawing from Piètte*

The feather as phallus symbol

right, 191

In Magdalenian times the phallus, like the vulva, took on a more abstract form. The quill-like, feathered shaft, which is found so frequently on the walls of caverns and on bone engravings, has recently been recognized to represent male qualities. This was suggested by F. Boudier (1958, p. 8) and has been amply confirmed by Leroi-Gourhan on these grounds: "not only because of the frequent association of the feathered signs

with triangular or oval signs, whose meaning is barely concealed, but also because of the existence of two Magdalenian objects from La Madeleine and Massat, both with the theme of a bear associated with representations of male and female organs: the first showing them in a realistic manner, the second by means of abstract signs" (1958, p. 386). Furthermore, in between the large bell-shaped vulvas in the cavern of El Castillo is thrust a long, dominating, feathered symbol of the phallus.

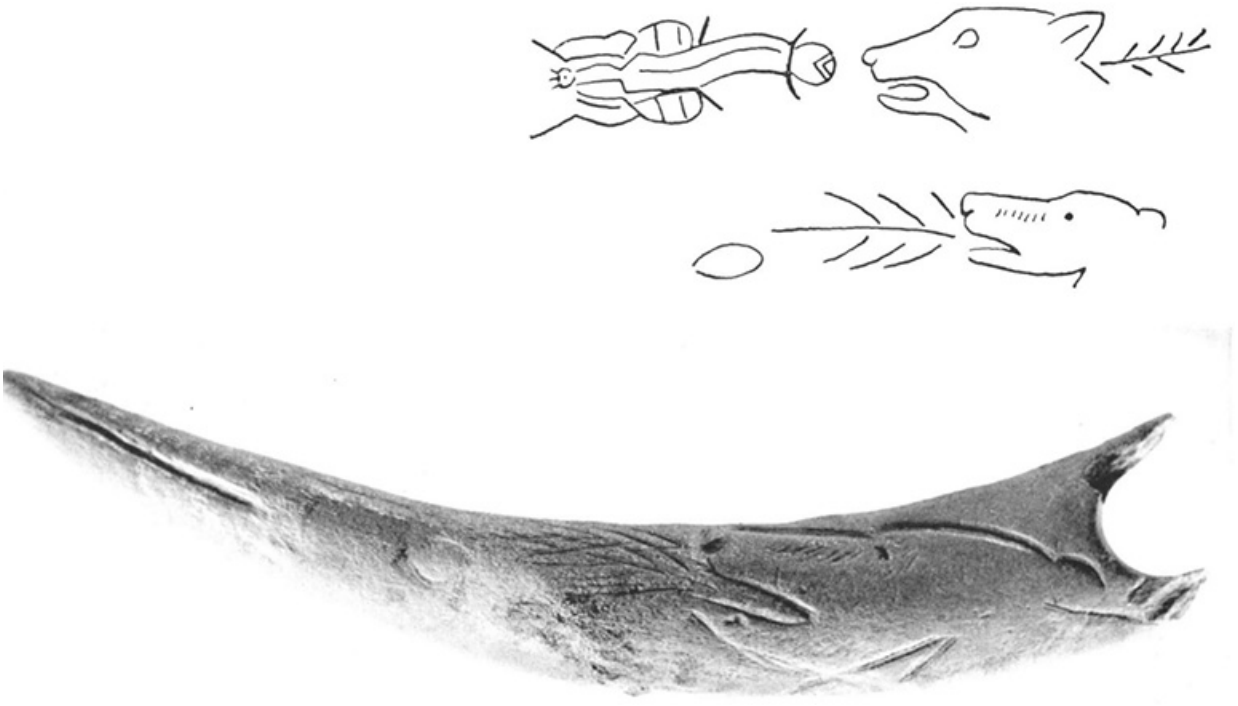
Not without reason Leroi-Gourhan adds: "It is rather surprising that, but for the accidental case of these two insufficiently explicit drawings, this apparently fundamental dual character would have been completely overlooked by the numerous research workers who are occupied with the meaning of signs."

204, 205

That the interpretation of a feathered shaft as a phallus is on the right path can, we believe, be further confirmed by certain reliefs on the earliest of three Predynastic ithyphallic statues of the Egyptian fertility-god Min found, in fragmentary form, by W. M. Flinders Petrie in 1893 at Coptos, thirty miles north of Thebes. These three colossi, as their finder called them, must have been pillarlike statues approximately thirteen feet high, which is extraordinary for the Late Predynastic period. "The position in which these figures were found unfortunately shews nothing . . . as they lay beneath the thick sand bed of the Ptolemaic temple" (Petrie, 1896, p. 7). No similar examples exist, and unfortunately nothing is known of the context in which they stood. The bodies are nearly cylindrical in form, the arms closely pressed to the sides. Upon a flap depending from the girdle of the earliest figure are engraved— again according to Petrie (p. 7)—" a stag's head, mouth down, with four tines on each horn, and from the mouth a long projection, which appears as if it were a stake, on which the head is spitted through the mouth; below the stag's head are two *pteroceras* shells." But it is not a question of a stake on which the head is spitted — rather, we have here the same relationship as before: an animal, this time a stag with forked featherlike antlers and outstretched tongue, approaching two vulvas in the form of conch shells.

133. LA VACHE (*Ariège*): *Polished bone engraved with bison's head, its tongue outstretched, in conjunction with abstract representations of phallus and vulva*

134. LA MADELEINE (*Dordogne*): *Staff engraved with a bear's head, its tongue outstretched, in conjunction with a realistic representation of a phallus and vulva. With drawing by Leroi-Gourhan, 1958*



135. MASSAT (*Ariège*): *Part of a pierced staff engraved with a bear's head, its tongue outstretched, in conjunction with an abstract representation of a phallus and vulva. With drawing by Leroi-Gourhan, 1958*

201, 200

The procreation (fertility) symbol expressed by an animal with outstretched tongue licking sexual organs reaches far back into the Magdalenian period: note, for example, the two engravings cited by Leroi-Gourhan — a staff from La Madeleine (Dordogne) engraved with a bear licking a naturalistic phallus, and the one from Massat (Ariège) showing a bear licking an abstract phallic representation, namely a feather —as well as a bone from La Vache (Ariège) engraved with a bison's head together with phallus and vulva symbols.

205, 206, 206

Even closer to the stag on the Min statue, stretching his tongue toward vulva symbols, is a Magdalenian bone engraving from Arudy (Basses-Pyrénées) showing a shaggy horse with tongue extended toward abstract vulvalike representations. The antlers of the stag are the oldest symbol of the fertility-god Min, and the reliefs on the girdle flap of still another statue fragment —the third and latest —found at Coptos give a clear picture of the abstract version of the same scene. Here "the emblem on the pole is manifestly an archaic form of the regular hieroglyph for the god Min, with the addition of a feather on the top. . . . [It is] in a more primitive and pictorial form than any known in Egyptian carvings" (Petrie, pp. 8, 9). The feather-like end of the vertical staff is a representation of the phallus similar to that above the Magdalenian altar in the cavern of El Castillo. The same feather-like symbol appears also in the cavern of Niaux (Ariège) several times: we depict an isolated example, on the triangular end of a tonguelike rock extrusion.

136. PACIFIC NORTHWEST INDIANS: *Ritual rattle: reclining male figure with tongue outstretched into frog's mouth*

311 ff

Concerning the Min statues, Petrie adds: "The objects upon the flap are indicated by hammering the outline as a slight hollow around the figures" (p. 7). This technique of sunken relief had been known and used since the Aurignacian-Perigordian period.

An Indian ceremonial rattle

The art of the Northwestern Pacific Indians is, as in prehistory, based on rites. It was rites that gave the plastic imagination an incentive to elaborate the feasts and initiation ceremonies with suitable objects. In no other field was the artistic achievement of these people so remarkable as in their ceremonial masks and rattles. The masks, being mobile, could go through several transformations — from one animal to another and from animal to man. Masks express the inner bond between man and animal: the man who could appear as an animal, the animal that could put on human form, in constant interchange. The man wearing the mask became the animal or demon it represented.

left

The significance of the ceremonial rattles is more difficult. They were shaken in the shaman-dancer's hand during ceremonies of initiation. A typical example of these perforated carvings represents, in its overall lineaments, a bird combined with other creatures. It has a flat back on which the figure of a man lies prone, knees raised, his exaggeratedly long tongue stuck into the mouth of an animal crouching on his belly, often a frog but sometimes a bird. His feet rest on the back of a fantastic miniature mask, the nose of which curves back into its own mouth, again tonguelike.

The significance of the mythological content is by no means clear. As Franz Boas stated, "The primary idea underlying the form of the rattle seems to have been lost, since the only explanation that has ever been given by the northern Indians is to the effect that it was given their ancestors by a supernatural being" (1895, pp. 629–30). E. S. Carpenter did me the kindness of questioning several other ethnologists in the field about this type of artifact. Nearly all adhered to the idea that the rattle signified curing or casting an evil spell. Niblack was cited: "The frog is supposed to possess a subtle poison in its head which, when sucked out, enables a medicine man to work bad spells" (1888, p. 324).

But the question must arise: why are so many symbolic attributes portrayed on this highly ceremonial instrument? Can they merely represent a curing or spell-casting scene? In a larger context, this rattle belongs to the wide range of primitive and primeval depictions of the animal-man relationship. It is surely more than a "curing scene."

137. COPTOS (*Egypt*): *Predynastic ithyphallic statue of the god Min*

ITHYPHALLIC FIGURES

It is difficult to draw a clear line of demarcation between ithyphallic figures and simple representations of the phallus. They have the same basic intention. As a type the

ithyphallic figure persisted longer than that of the goddess with a deeply incised vulva symbol. In Egypt ithyphallic figures have been found up to the Hellenistic period.

Among nearly three hundred configurations in the cavern of Les Combarelles, the Abbé Breuil counted thirty-nine anthropoid figures. As he noted with his unerring eye, these figures are artistically mediocre. The rock surfaces of this cavern are corrugated and quite unsuitable for line engravings or even for reliefs. Also, the space is very cramped.

208

One of these scenes shows an ithyphallic figure, bending towards a woman (who is not in the photograph): "The man bends far over to the left as he walks; his legs are somewhat straddled, his arms stretched out in front of him and slightly bent. The abdomen is pendulous, the phallus in erection" (Capitan, Breuil, Peyrony, 1924, p. 116). If there has been any attempt to represent a head, it can hardly be recognized. Leaning against the man and engraved over him is a smaller female figure, apparently quite unconnected with the "scène intime" observed by Breuil.

511

To this series must also be assigned the scene at Lascaux, variously interpreted, in which a man with a bird's head faces a wounded bison.

210

Ithyphallic figures which make use of existing rock formations are rare, but one exists in the cavern of Le Portel (Ariège). Upon a wall covered with stalagmites is the rough outline of a man drawn in red ocher. A protuberance of the natural rock in the middle of the figure is taken to be a phallus and to give meaning to the whole. This form has also been accentuated with red ocher. Breuil describes the figure as follows: "Aurignacian, outlined in red. . . . Arched forehead, the eye marked by an oval spot. Massive trunk, enlarged abdomen. A huge phallus, formed by a projection in the rock, rises vertically. . . . The arms are greatly simplified. The right hand is directed toward the phallus" (Breuil and Jeannel, 1955, pp. 197–204). On the same wall, in the immediate vicinity of this ithyphallic figure, are some large red symbols whose meaning is indeterminate. The best that we can say is that one of them may indicate that supreme symbol of fertility—bisexuality.

COPTOS: *Girdle flap from left side of the Min statue*: *stag with tongue etched toward two conch shells* (*vulva symbols*). *With drawing*

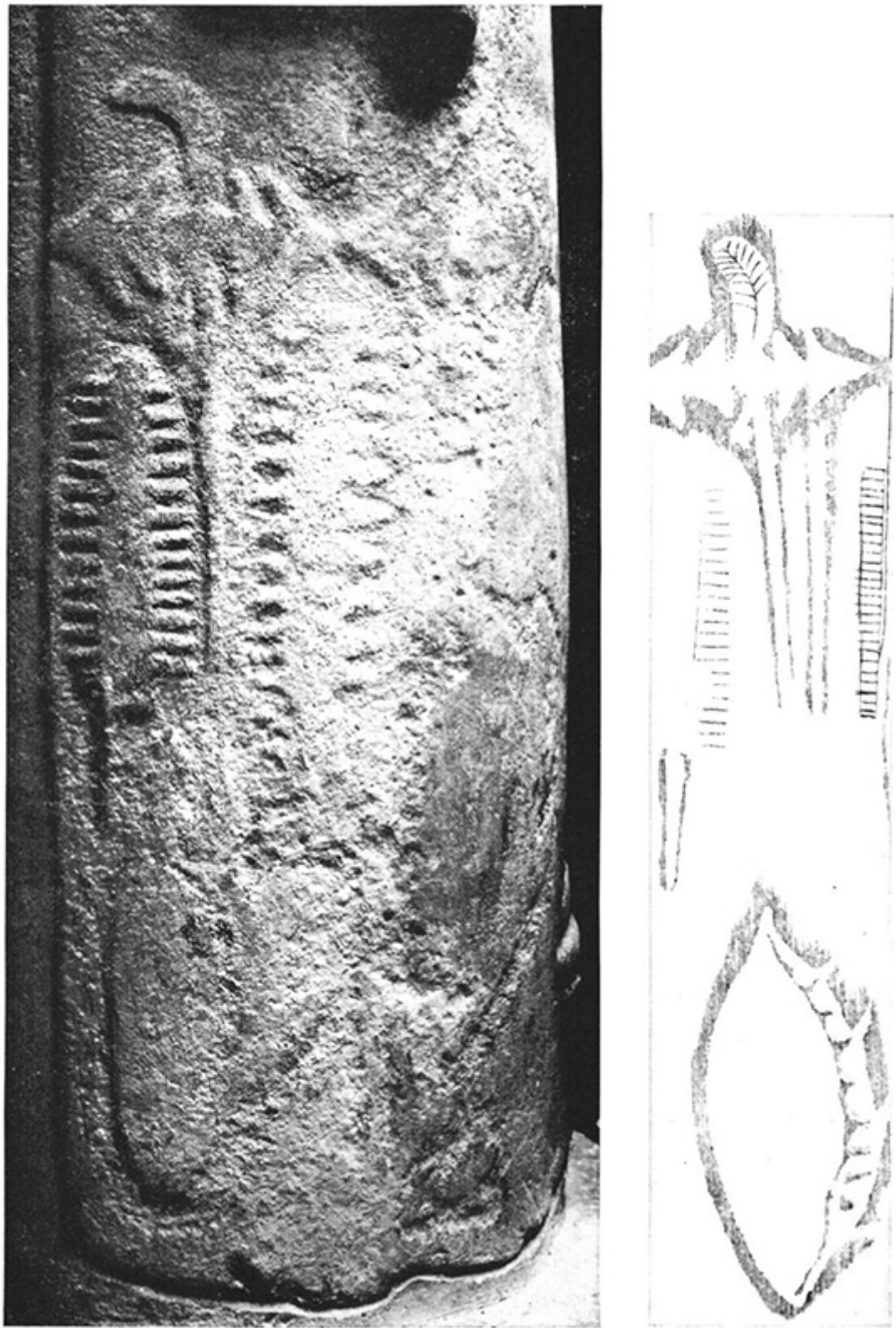
139. ARUDY (*Basses-Pyrénées*): *Bone fragment engraved with horse, his tongue outstretched toward abstract vulva symbols*

209

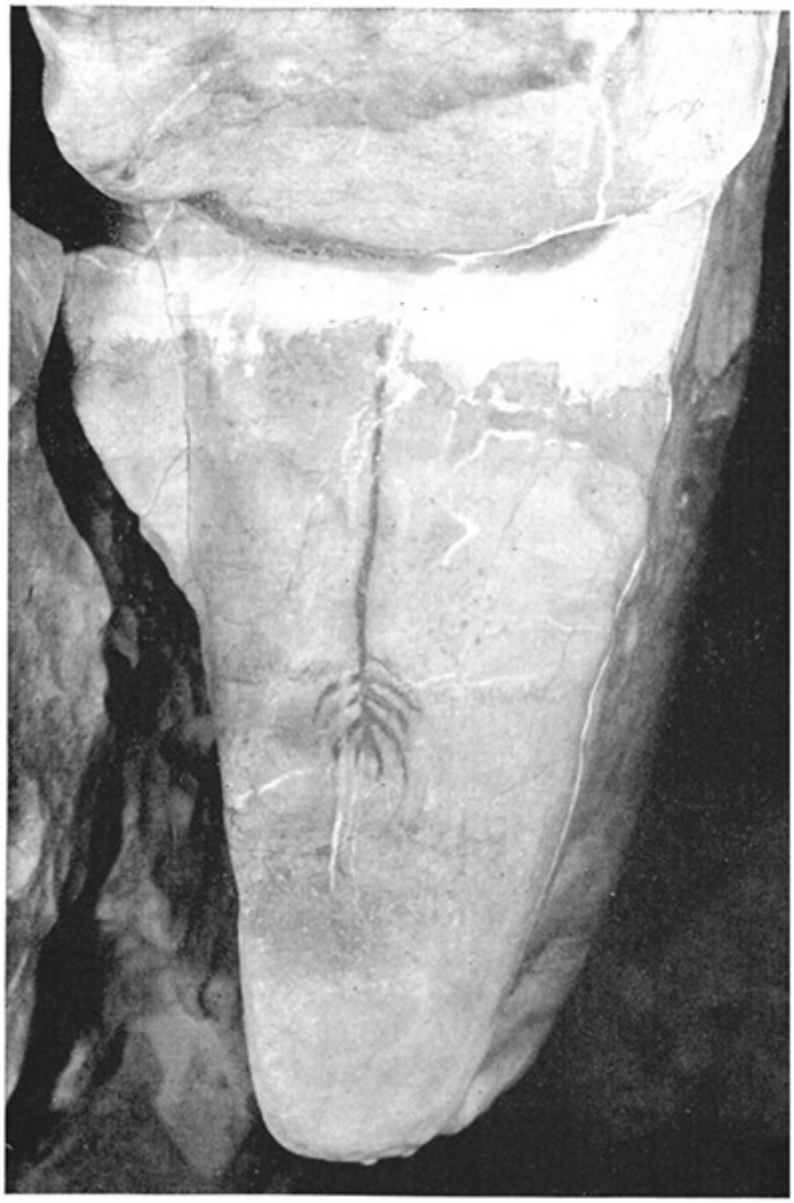
Numerous Magdalenian ithyphallic figures engraved on bones have been found. These are generally composite figures with animal heads, like the bone engraving from La Madeleine, where such a figure stands with upraised arms.

210

Among Lalanne's finds from Laussel was a thirty-centimeter phallic figure of the same type as that found at Le Portel. Lalanne described it as "a male figure, crudely sculptured . . . one assumes a very small [featureless] head. The arms are hanging. . . . The artist has lavished all his skill on the *membrum virile*, which is erect and flat against the rock" (1911, p. 139).



140. COPTOS: *Girdle flap from left side of another Min statue: archaic form of emblem of the god Min, surmounted by feather and, below, a conch shell. With drawing from Petrie, 1896*



141. NIAUX (*Ariège*): *Feather-like symbol on downward-projecting part of cave wall, itself phallic in form*

Ithyphallic tradition in Egypt and Greece

209

One of the oldest Egyptian ivory figurines, found in El'Amrah, is ascribed to the early Nagadah period — that is, at the end of prehistory. Though the head is modeled, the limbs and torso have been reduced to a minimum, and all emphasis is centered on its phallic aspect.

204, **205**, **206**

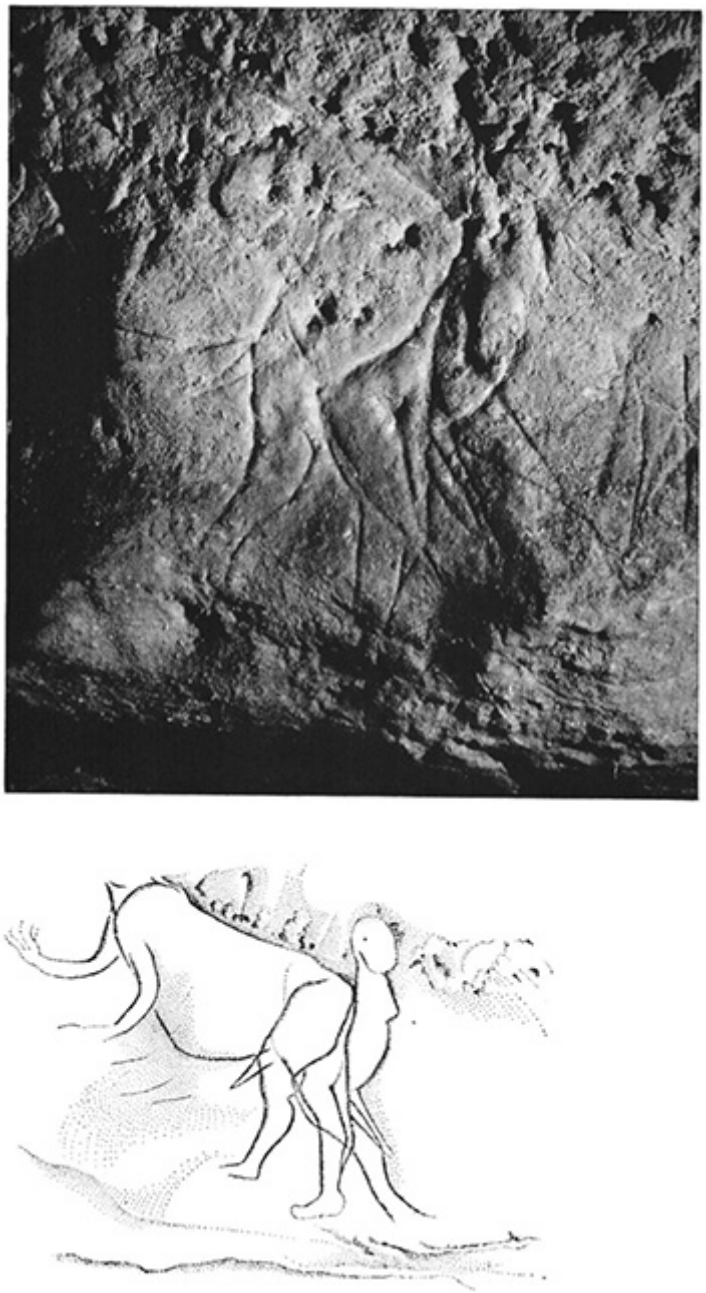
The ithyphallic form of the three colossi considered to represent the fertility- god Min, as well as the fertility symbols engraved on a strip depending from the girdle, establishes their relation to paleolithic times (Petrie, 1896, p. 7). Min is a fertility-god

of agriculture, and it may be assumed he represents the same mutation of the concept of fertility as the female idols do: the transference of increase in the fertility of the species to an increase of agricultural fertility. Min's cult persisted throughout the entire length of the Egyptian Empire. Even in the temple of Luxor, in the reliefs (4th cent. B.C.) surrounding the sacred bark, the god Min stands in his characteristic form face to face with the crowned conqueror-Pharaoh, Alexander the Great. (The relation of Min with the supreme god Amon will be dealt with in the second volume.)

The extent to which the Min cult developed may be gathered from the most magnificent surviving representation of the procession of Min and the rites connected with it. These are depicted on the reliefs around the walls of the temple of Medinet Habu. There the Pharaoh Ramesses III (1198–1166 B.C.), the last great king of the New Empire, is shown together with the god Min in an unbroken series of interrelated scenes of the harvest festival. The statue of the god is borne in procession, preceded by standards and a white bull. Four birds fly as messengers to the four corners of the earth. All these are intimations that age-old symbols retained their power in later periods.

No direct comparison can be made between primeval ithyphallic representations and the rites of a fertility deity such as Min. The female idols are more illuminating because their meaning is much more obvious. But in both cases we lack the successive links to connect them through the millenniums with their common origin.

In Greek mythology it is Hermes who is represented as the ithyphallic, life-giving, life-begetting shepherd-god. Like so many Greek gods, he has had many meanings attributed to him. As the servant and messenger of Zeus, Hermes is god of the air and the winds. Air and wind were believed to be begetters of life, and as a result of these early notions Hermes, god of the winds, also became a fertility-god, evidenced by one of his symbols — the phallus. Herodotus describes the practice of representing Hermes in ithyphallic form as Pelasgian (Roscher, p. 2376) and thus ascribes it to the earliest inhabitants of Greece.



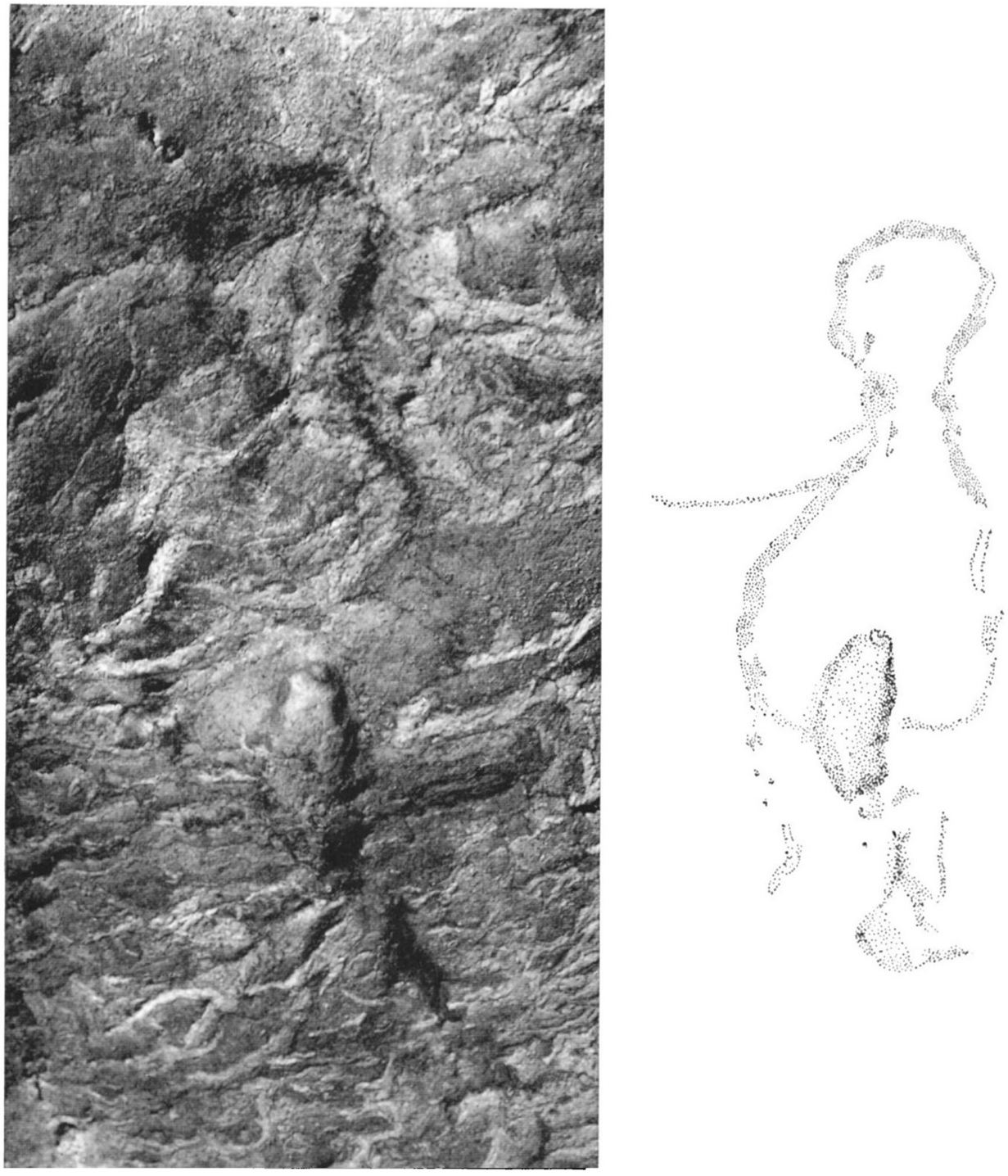
142. LES COMBARELLES (*Dordogne*): *Magdalenian engraving of an ithyphallic man and another human figure. With drawing*

143. LA MADELEINE (*Dordogne*): *Bone engraved with animal-headed ithyphallic figure*

144. EL'AMRAH (*Egypt*): *Ithyphallic statuette, early Nagadah period*

The oldest form in which Hermes was worshiped was that of a phallic stone, or herma. It is in question today whether the four-square Hermes columns derive directly from earlier pillar-shaped stones or from wooden idols. As a type, the squared Hermes column of classical times — with the protruding head and neck of the god, short stumps

for arms, and a large molded phallus on an otherwise plain shaft — doubtless harks back to stone-age traditions.



145. LE PORTEL (*Ariège*): *Red-painted ithyphallic figure, its phallus formed by natural rock projection. With drawing*

146. LAUSSEL: *Phallic figure in limestone* (30 *cm.*)

BREAST

The symbol of the breast

457

The female figurines of the Aurignacian-Perigordian period have strongly accentuated and protuberant breasts. Their heads are often insignificant, sometimes even absent. The observer's eye is at once drawn to the breast. Its great importance to Aurignacian man is shown by one of the headless "goddesses" of the Hall of the Hieroglyphs at Pech-Merle, in which the only parts of the body on which care is expended are the two huge pendulous breasts, shown in profile, one above the other.

In contradistinction to the hand, vulva, and phallus, the breast was not depicted as an independent fragment. Only when some natural formation of the rock struck the eye as closely resembling the female breast was this likeness accentuated by painting.

214, 215

Even here, so far as is known, there is only one case that leaves no room for doubt, but this is an exceedingly curious one. It is in a part of the cavern at Pech-Merle known as Le Combel, discovered in 1949. In the passage just before the sanctuary, there are three conspicuous rows of large red dots or disks. Upon the low, curving ceiling, not quite high enough for a man to stand upright, is a natural protuberance of the rock, a stalactite, the size and shape of a female breast, which has been encircled by twenty red dots. This natural formation has become the focus around which the red signs are tightly clustered.

216, 327

But this is merely the prelude. How the imagination of Aurignacian man must have leapt when, on the ceiling of the adjacent innermost sanctuary (only 80 cm. high), he perceived a wreath of stalactites reproducing, in amazing beauty, size, and shape, female breasts, even to the nipples. The lower part of several of these breasts has been painted black, and, upon the only wall with an even surface in this bunkerlike cavern, possibly the most enigmatic symbol of primeval times has been depicted. This is a composite representation of a lioness, three antelopes, and a rhinoceros. It seems safe to assume that a connection existed between the stalactite wreath of breasts and this composite animal, and that this was the shrine of a fertility cult.

216

A bronze libation vessel of the third millennium B.C. from Sialk (Iran), in the Louvre, has the long narrow spout and bulky, bodylike shape typical of these ritual vessels. But just below the elongated spout a large female breast has been painted, marked with concentric rings. This is encircled by eight smaller breasts.

217

It is probable that the Cycladic vases called *kernoi* (Dussaud, 1906, p. 123), whose use is still uncertain, also belong to this category. The larger vases, which are breastlike, are encircled by six or more small vases of the same form attached to their rim. These have been thought to be ornamental vases, possibly for flowers. It may be, however, that we are before some cult utensil, perhaps a libation vase. A libation table discovered at Phaestos seems to indicate this. Along the central line of this table of red-painted earthenware and incorporated within it are six vases, 8 to 10 cm. high.

217

In Egyptian mythology, the goddess Selkhit (who became a scorpion-goddess in the New Kingdom) is normally portrayed headless, with two protuberant breasts, partly painted black. She is shown as she "emerges from the Mountain of the West to gather into her outstretched arms the setting sun" (Jéquier, 1946, p. 240).

The breast and the transformation of a deity

220, 221

A stranger among the Greek gods, with their perfectly proportioned bodies, stands the Ephesian Artemis, the many-breasted.

She represents a composite of symbols. Just as in prehistory, a number of diverse symbols have here been brought together so that, by their conjunction, a more powerful effect can be achieved. The origins of the cult of this idol are rooted in prehistory. From this shadowed period it reaches forward even into the days of the Roman Empire.

Artemis Ephesia is the result of a long process of anthropomorphism which began when the dominion and veneration of the animal came to be replaced by the power of deities in human form.

In the course of recent decades, archaeologists have pursued far-reaching discussions about the meaning of the figure of Artemis of Ephesus and her accompanying animals. They have sought to arrive at the origins and forerunners of the Roman Artemisian statues. A study was made of pottery figurines of the seventh to the fifth century B.C. from Tanagra, Sardinia, and Sicily (Meurer, 1914); all known statues were collected together (Thiersch, 1935); another study was made of imperial Roman coins (Seltman, 1952). In the end, agreement was reached that the life-size Roman statues of Artemis Ephesia did not really display rows of actual breasts but that these constituted a sort of garment padded with an unsightly, unorganic attachment of udderlike breasts: "An especially noticeable point is the . . . absence of nipples, which are never omitted even from nude male figures" (Meurer, p. 200).

It is now accepted that the cult statue which stood in the temple at Ephesus possessed a wardrobe of interchangeable symbolic garments which were in the care of the priestesses. But the assertion that her breastlike protuberances were in fact formed from eggs or eggshells, or even from especially large dates (Selt-man, p. 42), is not in itself very illuminating; nor is the additional information that they were derived from the Egyptian form of necklace or pectoral; but the boldest suggestion to be put forward is that Roman artists "paid little attention to depicting jewelry, for they sought to arouse a sensual excitement through the shock of the appearance of definite female breasts" (Meurer, p. 12).

The interchangeable garments and the manner in which they were attached to the figure are certainly points of interest, but they do not approach the heart of the matter: the figure's meaning and symbolic content, which are foreign to the Greek world.

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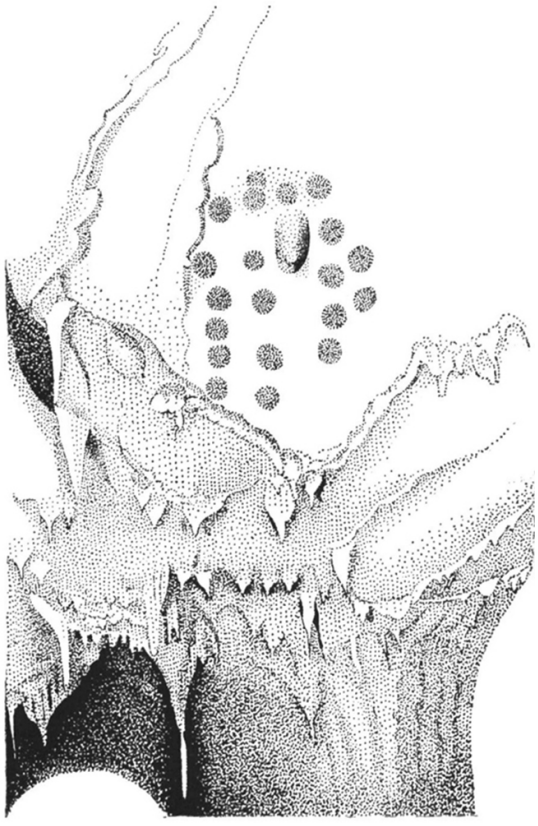
A small (77 cm.) torso in the National Museum of Athens gives a more significant hint toward the meaning of these rows of breasts than the voluptuous statues of Hadrian's time. It has neither head, arms, nor feet, and its place of origin is unknown. The opinion that this is a post-Hadrianic sculpture seems unlikely (Thiersch, 1935, p.

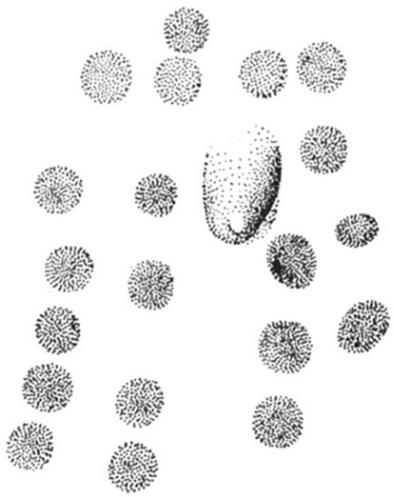
2). The delicate modeling of the folds of her garments and the subtlety of the entire figure are not typical of the coarse work of Imperial Roman times. The hint as to the meaning of her seven rows of breasts is given by their arrangement in a triangular form, ranging from seven to one. This is no accident. It represents a composite symbol, breasts and triangle, which has persisted from prehistoric times. The triangular arrangement of her breasts shows a relationship with the breastplate of Zeus Labrandenos (Meurer, 1914, p. 218). The venerated Zeus Stratios, found in Caria, Asia Minor, also bears a breastplate composed of three rows of breasts arranged in a triangle. This does not in any way mean that, in Asia Minor, Zeus was considered androgynous. He was a life-giving and life-renewing symbol.

Archaeologists have with justice repeatedly stated that representations of Artemis with her rows of pendulous breasts must have seemed monstrous and revolting to the Greeks. She has nothing in common with the Greek gods and goddesses as they normally appeared. She recalls far older representations. Passages which attribute her statue at Ephesus to the age of the mythical Amazons are by no means "merely fanciful" (Pauly-Wissowa, V, 2756; Seltman, 1952, p. 34). They contain an inner truth.

The Ephesian Artemis possesses many of the essential attributes of other Mediterranean goddesses. All were fertility-goddesses. In Phrygia: "The divine power of Cybele was embodied in a baetyl, . . . apparently a meteor fragment, small, uncut, and black in color. . . . Cybele was the mother of all other gods. . . . She has created, and she maintains, all life. . . . Cybele thus has the characteristics of the widely known 'Mother Earth'" (Persson, 1942, pp. 105–106).

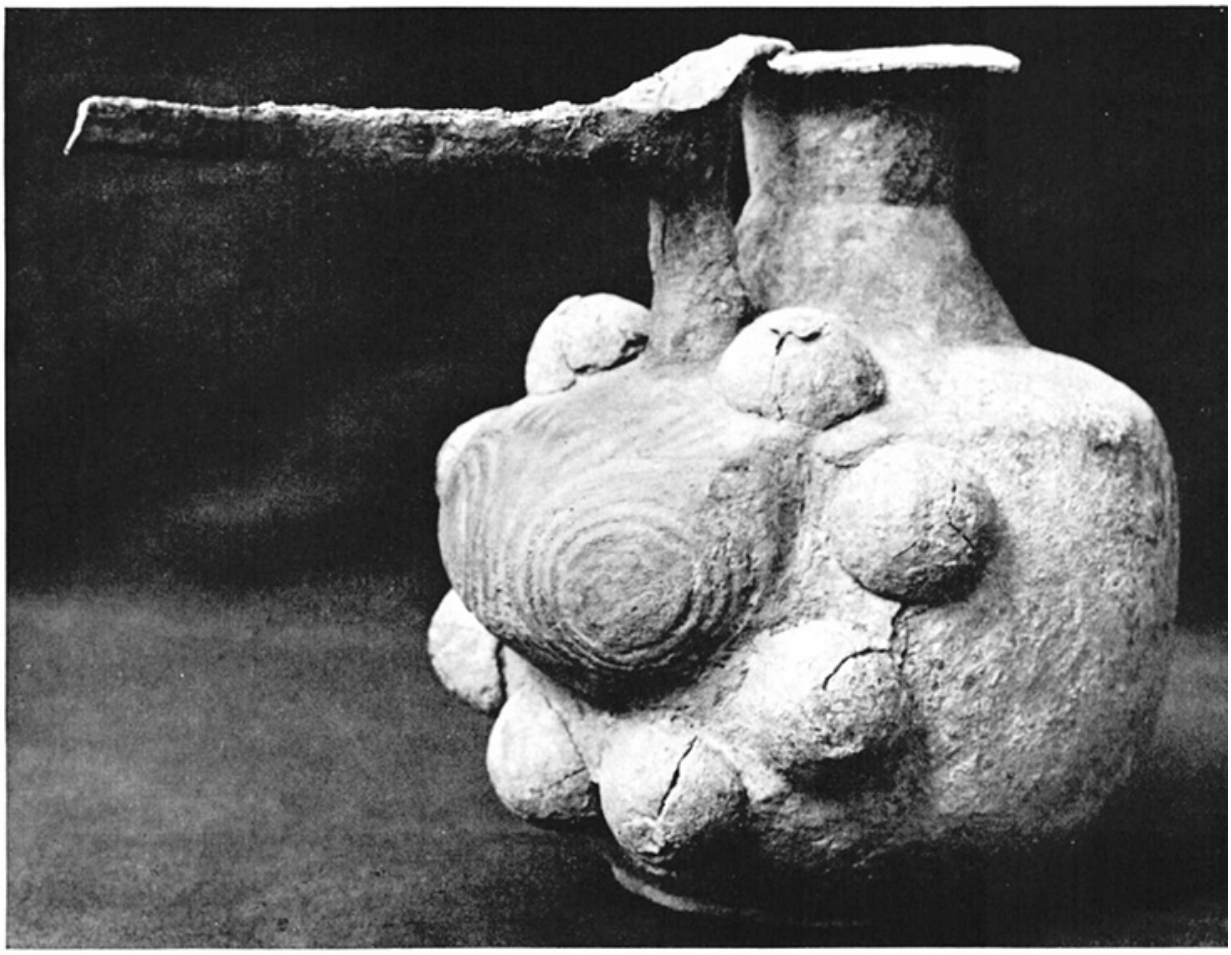


147. LE COMBEL, PECH-MERLE (*Lot*): *Stalactite in the form of a female breast, surrounded by numerous red dots, just before the innermost sanctuary. With drawing*

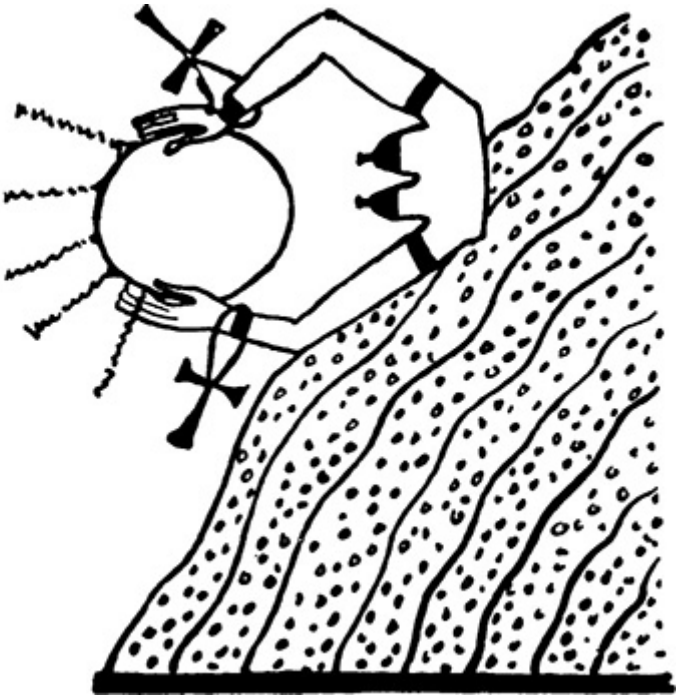


148. LE COMBEL, PECH-MERLE: *Detail of breast and dots. With drawing*

149. LE COMBEL, PECH-MEHLE: *Wreath of breasts*, *partly painted black*, *on ceiling of innermost sanctuary*



150. SIALK (*Iran*): *Libation vessel in the form of a wreath of breasts; third millennium* B.C.



151. EGYPT, *New Kingdom: The scorpion-goddess Selkhit; ca. 1500* B.C. *From J équier, 1946*

Asiatic origin of Artemis Ephesia

504, 220

The figure of Artemis Ephesia came from the hinterland of Asia Minor. So far there is general agreement. The question of her place of origin and of her wanderings is lost in darkness. Suddenly she emerged in Ionia as a great goddess, a xoanon fallen directly from heaven, a creature foreign to the world of the Greeks. Links with her past are lacking. Her columnar figure is proved to derive from a holy pillar or a holy tree. The animals beside her were probably her companions and helpers. But, from her first known statue until the latest recently unearthed in Ephesus, stags with their spreading antlers play an important role. Like the shamans with their antlered headdresses, she has these and other animal assistants incorporated into her garments, and her many breasts remain as a symbol of nurture and fecundity. In strict fact, Friedrich Creuzer was inaccurate when he described her statue in Naples as "the world nourisher, whose breasts are nearly always the breasts of animals," but in spirit he was correct (1840, p. 580).

152. CYCLADES: *Kernoi vases, the upper six resembling a wreath of breasts, with outlined triangular perforations below. From Dussaud, 1906*

The transformations of this goddess cannot be followed in detail. In the late Roman period different elements were brought together, often very crudely. The primeval power of the goddess as a potent operative symbol was completely forgotten.

Ephesus, center of the cult of Artemis Ephesia, lies on the coast of Asia Minor. The goddess's sanctuary here was regarded as one of the seven wonders of the world. The cult arrived in Ephesus from Anatolia and was fully developed when the Ionians, migrating from the Greek mainland, found it there and adopted it for themselves. It was a savage cult with its climax —like most other fertility cults —at the spring festival, in

the month Artemision. This was celebrated with bullfights and "wild orgies at which men castrated themselves and women prostituted their bodies" (Persson, p. 146).

Every detail of Artemis Ephesia reveals her Asiatic origin, but how the different symbols acquired this composite form is still a complex question. In Ephesus "the cult image was held in high regard, since it was believed to be very old and to have fallen from heaven. Originally it was a cylindrical wooden image, narrowing at the bottom" (p. 143).

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This column tapering towards the ground (in contrast to the Doric columns) forms an iconographic part of all later cult statues of the idol. It was a xoanon, a tall wooden cult statue made from cedar or ebony, which "grew year by year blacker in the face from the constant use of rich olive oil that was rubbed into the ancient wood" (Seltman, 1952, p. 39). The mother-goddess stands in this form between two lionesses over the gate at Mycenae. Artemis Ephesia retains this shaftlike body even in her latest images, though then "the upper part of body was given a human shape . . . depicted with arms outstretched" (Persson, p. 143). Her triple rows of naked breasts remind one of the stalactite breasts of Le Combel and of the wreath of breasts on the libation vessel from Sialk. "The multiplicity of breasts expresses the beneficent nature of a divinity who promotes all earthly growth, and the fertility of animals and crops" (Roscher, p. 590). According to Pliny (XVI, 213 f), her famous statue at Ephesus was made by the Greek sculptor Endoios, which would place it about the middle of the sixth century B.C. (Seltman, p. 34). The prototype for all later classical reproductions was therefore an archaic Greek statue.

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Thiersch brought together a collection of forty statues, or parts of statues, of Artemis Ephesia. The best known of these is the statue in the museum of Naples, which probably dates from the time of Hadrian. It is "the largest and most carefully worked example, and the most precious, being made of oriental alabaster and bronze" (Thiersch, 1935, p. 17). Almost without exception these statues have suffered from additions and restorations.

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The first statues to be found upon the chief site of her cult —Ephesus —were excavated in 1956 by F. Miltner (1958). These two figures, also late copies from the time of Hadrian (A.D. 117–138), have the advantage that they were found undisturbed. One was life size, the other double this. Her outstretched arms were a feature of Greek statues from the archaic period. The life size statue of the goddess wears a necklace of the signs of the zodiac, similar to those worn by Roman ladies, and her features have the glacial expression of many deliberately archaic statues of Hadrian's time. All over the shaft, and on either side of her head, stand animals from her retinue: "The lions

represented wild nature; the ram and the bull, so well known to us, are the representatives of fertility and fruitfulness. . . . The bee is probably to be interpreted as a symbol for nurture" (Persson, pp. 143–44).

The most revealing of all her traits are perhaps the stag hoofs upon her pedestal. These are all that remains of a pair of life size stags that stood on each side of her. It is just these footprints which give the clue to the origins of this fertility deity, who has undergone so many transformations.

153. ALAJA HÜYÜK (*Anatolia*): *Stag-god, copper with silver mask. The body is covered with inlaid concentric circles* (*fertility symbols?*); H. *52.5 cm.*

154. BOGHAZKÖY (*Hittite*): *"The god on the stag, "steatite stele. Drawing from Vieyra, 1955*

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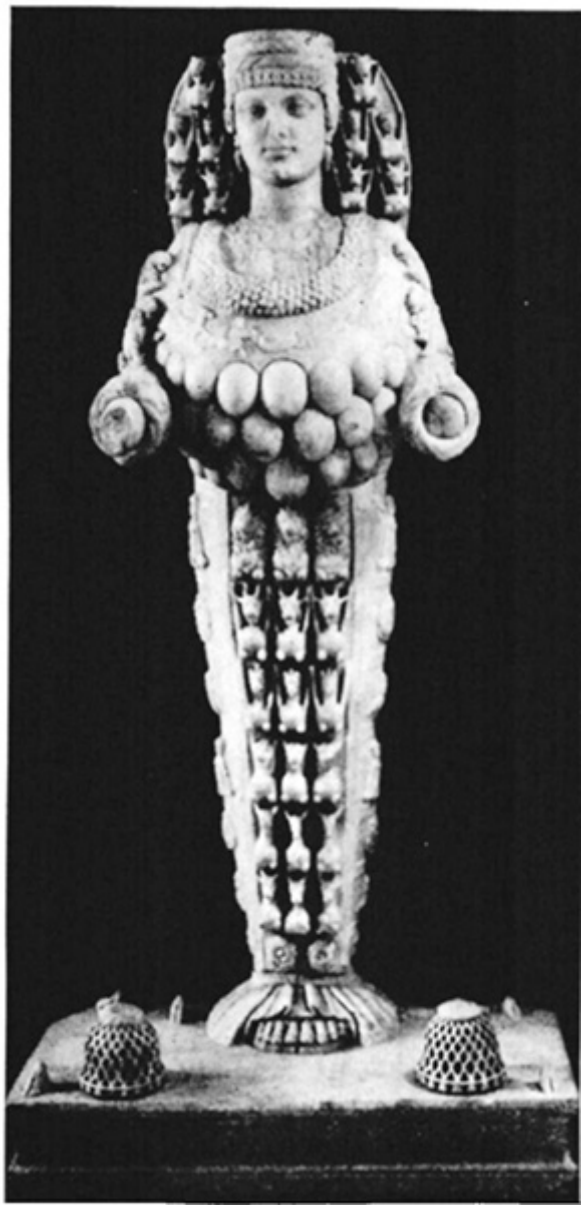
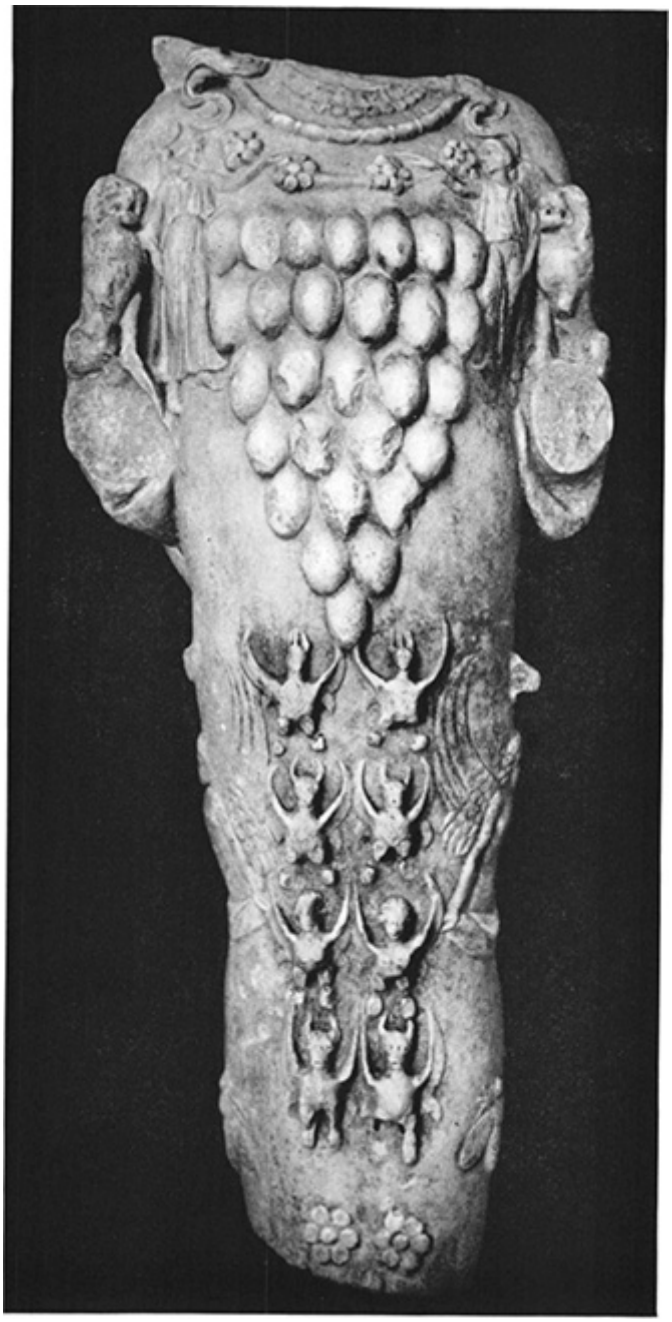
In Alaja Hüyük, northern Anatolia, several tomb statuettes of animals were found in 1936. These animals have a singular intensity: "they are without parallel in the Near East" (Frankfort, 1954, p. 114). All date from the pre-Hittite period of the last quarter of the third millennium B.C. (2350–2100). This is a very late date for representations of prehistoric animal worship, but in this mountainous district, whose inhabitants had come from the region of the Caucasus, it is perfectly understandable. In connection with these finds at Alaja Hüyük, references may be made to a rich royal tomb excavated in 1895 at Maikop, in the valley of the Kuban, southern Russia. Numerous animals — bulls, stags, lions —" of gold and silver but of smaller size than those from Anatolia and of lesser sculptural intensity, were found here. The horns of the bulls are noticeably exaggerated" (Gimbutas, 1956, p. 9). This and related finds "may be dated in the second half of the third millennium before 2100–2000 B.C. (p. 59).

155. GREEK: *Artemis Ephesia, the many-breasted Diana of the Ephesians, now in Naples; ca. 1st cent.* A.D.



156. EPHESUS: *Newly found life-size statue of Artemis Ephesia; ca. 1st cent.* A.D.



157. GREEK: *Artemis Ephesia* (77 *cm.*), *probably 5th cent.* B.C.

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One of the largest statuettes at Alaja Hüyük is a stag made of copper. It is 52.5 centimeters high and is perched upon a slightly inclined pedestal, apparently shaped to represent antler tines. The body of the stag is covered with designs inlaid in silver: concentric circles, crosses, zigzags. A silver mask conceals his face. The antlers are especially carefully treated: they are silver-plated. "A representation of the stag-god, a deity whose cult survived into the Hittite period. It is probably the god whose name is written in the cuneiform Hittite with a Sumerian diagram LAMA, and whose Hittite reading is still uncertain. In the later period, the god will assume human form, whilst preserving the stag as his attribute" (Vieyra, 1955, p. 59).

On a stele and from seal impressions of a few centuries later, found in the Hittite capital, Boghazköy, twenty-five kilometers from Alaja Hüyük, a god is standing on a sacred stag. It indicates the transition period, when the new anthropomorphic god is represented together with the venerated animal he will replace. That he stands on the animal's back signifies that the anthropomorphic form becomes the superior one.

Numerous instances exist of the transformations of a deity, as well as of the constancy with which primeval symbols persist throughout all periods and all stages of this transformation process. A single case has been here described. Ephesian Artemis' symbols of nurture and fecundity, her three rows of breasts and the animals in her retinue, have been traced back into prehistory; and the two stags that accompany her statue at the time of Hadrian can be recognized as the survival of a venerated animal deity who was superseded by a divinity in human form. Her original idol-form — a sacred column or a sacred tree — is also still preserved in the shaft from which her body emerges.

In the composite symbol of Artemis Ephesia all these independent elements have come together. But they no longer have the active causative powers of primeval times.

All these are keynotes to the main theme of Artemis Ephesia. This subject interested that tireless pioneer into the meaning of symbols, Creuzer, so deeply that he sought on every side to find the central motif. Rightly he discerned the goddess as Panthea, the universal goddess, and set down the background of her origin: "The Ephesian goddess was also the Earth Mother; she was Nature itself; the great world nurse [*Weltamme*] as the Orphics called her; the mother with arms extended to clasp her children to her breast" (1840, II, p. 590).

BISEXUALITY

The idea that an androgynous or double-sexed being was present at the beginning of the world recurs frequently in creation myths. This is evident beyond doubt from the most primitive myths to Plato's *Timaeus*, with its overtones of Orphic teaching.

The situation is somewhat different when one attempts to approach the meaning, origin, and, above all, the metaphorical content of bisexuality in prehistory. Here authorities differ widely in their opinions. Much pictorial evidence has been found from the late Egyptian period and from Greece: to take only one example, the well-known Hermes Apollo statuettes. But when we approach prehistory and prehistoric representations things are quite different, and opinions are sharply contradictory.

It is thoroughly typical of Friedrich Creuzer that already in 1810, in the first edition of his *Symbolik und Mythologie*, he struggled with the problem of the bisexual godhead and tried to solve the meaning of certain Egyptian rites: "In these cults sexual duality was not infrequently vested in the same person, who thus became a man-woman or a

woman-man according to which sex prevailed" (I, p. 350). "The union of male and female attributes in a single being is evidenced very clearly in certain Asiatic cults by the actual conjunction of both sexes upon the same representation of the body" (pp. 361–62).

For a hundred years after Creuzer this branch of research into the meaning of symbols stagnated, but then another outsider, this time a doctor of medicine from Amsterdam, L. S. A. M. von Roemer, took up the problem. His essay "On the androgynous conception of life," well known to present-day anthropologists, relies upon Creuzer's material for much of its argument (Roemer, 1.903, pp. 707–940).

The reasons for this long stagnation lie in the fact that bisexuality presents a highly complex problem; but, since von Roemer's exposition, there has been a renewed interest in the question of a mythos related to bisexual beings. This interest was soon whipped up violently as the result of several publications by J. Winthuis, a German ethnologist and Catholic missionary. For years a most bitter controversy raged in anthropological circles, especially in the pages of *Anthropos*, a review edited in Vienna by Father W. Schmidt. Hundreds of pages were devoted to vituperative controversy, until finally the editor was obliged to state that the matter "can really only be settled in a court of law — and in fact preliminary steps have already been taken to that end" (Schmidt, 1931, p. 324).

All the heat arose from this contraposition: Winthuis considered all primitive thought to be based exclusively upon sexuality, whereas Father Schmidt, with great tenacity and enormous erudition, continued to expound the thesis that a belief in monotheism went back to the first man.

Winthuis based his opinion upon the conception of bisexuality. With modern man, a clear-cut distinction between male and female beings is taken for granted, but for so-called primitive man this approach was far too crude, "since every human being bears traces of his bisexuality," as Winthuis says in his best-known book, on habits in central Australia (1928, p. 7). The primitive Australian aborigines consider that all human beings were originally androgynous and, on the basis of their initiation rites, that bisexuality still frequently persists. This conception pervades the whole of their life.

Winthuis lived for more than seven years with the Gunantunans, a people of New Britain, an island of the southwest Pacific. He approached the question of the primitive's way of thinking through a study of their language: through semantics. Though the absolute validity of his translations cannot be judged by a nonspecialist, Winthuis certainly revealed more of the symbolic content of speech than others before him. He found poems containing words which, in our speech, are completely neutral, but for the Gunantunans were direct synonyms for the *actus generationis* (Winthuis, p. 7).

Perhaps it should be added that, with us, metaphors are customarily introduced by the word "like." But in much modern poetry it is otherwise: "le mot 'comme' n'existe pas pour moi," said Mallarmé. With the primitives the metaphor is directly identified with the thing itself. The Gunantunans simply identified the word "firestick" with the

membrum virile. They knew no other word for the nose than phallus; the eye was the image of the vagina, as well as their word for holes in general. Eye and mouth denoted femaleness; tongue and nose, maleness.

The human being was not conceived as solely male or female but as bisexual, since, as has been said, both possess evident marks of their bisexuality. As the Gunantunans see it, each man has many female parts of his body: eyes, mouth, nostrils, anus, etc. And each woman possesses male parts: nose, tongue, arms, legs, fingers, teeth, etc. "So both beings are double-sexed" (Winthuis, p. 21).

It is understandable that this overaccentuation of the role played by sexuality in primitive thought, and the consequent overlooking of many other root concepts, could not be readily accepted. But the sometimes rather simple arguments of the militant Father Schmidt brought into the foreground a most important primeval religious concept.

Hermann Baumann, a Munich anthropologist who had studied the double-sexed human being, was able to enlarge greatly the whole concept of bisexuality. His aim was to throw light on the universality of the religious concept of an androgynous godhead (Baumann, 1955, p. 129). Double sex denotes resemblance to this godhead and gives greater power through the combining of the sexes. Transvestism implies the same: men wear women's clothes and vice versa not through sexual perversion, as our own upbringing would lead us to believe, but because of a belief in an "almost material soul" which is to some extent transferable (p. 45). The specific appearance of these souls gives a special meaning to clothes and jewelry. By means of these, people believe they can move from the material realm of earthly life into the spiritual realm of magical religion. "Exchange of clothing is employed in all'rites de passage' such as birth, marriage, initiation, death, in order to ward off dangers and strengthen life" (p. 46).

Winthuis describes a much more drastic means of achieving bisexuality. On the occasion of initiation rites the young man is enabled to acquire an outward female trait as a result of a highly painful operation by means of which his bladder is perforated so that he urinates like a woman. The man "who by nature has only a male member should now also acquire a female attribute so that he can become a being like to the highest spirit" (Winthuis, p. 39).

True bisexuality is "to create unity from duality" (Baumann, p. 354). This is in accordance with a thread of thought which runs unbroken through the whole of prehistory.

At the beginning of his book, Baumann points out that present-day science has brought into doubt a sharp distinction of the sexes in the fields of anatomy, biology, and psychology: a distinction which, up to a short time ago, was regarded as an indisputable fact. A new, more flexible concept of sex distinctions replaces this all too simple premise; there is a clearer understanding of intermediary sexual stages. Once more the inner truth of a primitive concept becomes revealed, though from a rationalistic point of view it had been considered the height of absurdity.

In our context the only relevant question is the origin of the concept of bisexuality. In the opinion of Baumann the myth of an androgynous being, uniting both sexes, was evolved by the first high civilizations and radiated out from them to the primitive peoples, through what anthropologists call "diffusion." This opinion has been opposed by A. E. Jensen, of the Frobenius Institute in Frankfort, in a series of comparisons with the work of Baumann (Jensen, 1956, pp. 169–79). The existence of androgynous concepts in prehistory seems highly probable.

ANDROGYNOUS SYMBOLS

Although symbols of the sex organs are widespread and easily recognizable, the symbol for continuing procreation, for the two-in-one, for the androgynous being, is wrapped in obscurity.

It is remarkable that this symbol, which is so closely bound up with different cosmogonies, has not yet been identified with certainty in prehistoric remains. The reason lies partly in the little attention devoted to such problems and partly in the inevitable obscurity of the forms adopted by the symbol. But it seems highly unlikely that prehistory had no symbol to express this quintessence of fertility.

The two-in-one is concealed in a symbolic language we can only partially comprehend. Certainty is impossible: likelihood or, at the most, probability is all that one can hope for. But the following considerations may not be entirely worthless. Their starting point is a fundamental quality which reappears constantly in prehistory: a means of strengthening or fortifying the operative power of the active and sensitive symbol. This can be achieved by combining one symbol with another to form a "composite symbol" : e.g., the demand for an increase in fertility is strengthened when cupules are combined with representations of the desired animal species or of sexual organs, or when disks (*ponctuations*) are combined with breasts.

Hybrid forms — man and animal combined together — are also composite symbols. The symbol for an androgynous being, for two-in-one, would readily fall into this category of composite symbols.

In what form would the composite symbol of an androgynous being appear? Winthuis's view of the predominant, indeed almost exclusive, role played by sex in the actions and concepts of primitive peoples has been severely devalued by the anthropologists. Further, a direct transference of his findings to prehistoric times can be made only with great reservations. Sexual hypertrophy is an accepted sign of degeneration. In prehistory it was the concept of fertility rather than the sexual act which gave birth to their symbols. Certain images came to have cosmic meanings: caves were the womb of the Great Earth Mother. They were the source of all rivers. Looked at in this way, the findings of Winthuis, von Roemer, and Baumann can give a new impetus to the search for the symbols of bisexuality.

Despite the dangers of drawing conclusions from the ways primitive peoples think and act today, one cannot completely discard Winthuis's statement: "To the primitive all straight lines signify the *membrum virile*, the phallus; whatever is circular or sickle-shaped is the *membrum muliebre*, the vagina. However unlikely this statement may appear, it is our only way of gaining insight into primitive thought; indeed into the basic meaning of the whole spiritual culture, their legends, songs, cults, arts, and magic" (1928, p. 12). Leroi-Gourhan's research into the involved development of symbols for the vulva and the phallus in prehistory (1958, p. 520) bears some relation to this oversimplified statement by Winthuis.

The bâton de commandement and androgyny

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All straight lines betokened the phallus; all circles the vagina. Have we any evidence of parallels to this way of thinking in primeval art? In the forefront of any such consideration we might place the perforated staff, the *bâton de commandement.* A symbol of *androgyny* might well lie hidden in the form of this staff. Though this by no means implies that this would be the sole meaning of perforated staves: e.g., the leaping horse from the Abri Montastruc.

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The original form of a perforated staff, with no ornamentation, comes to us from the Aurignacian period: the Abri du Poisson (Dordogne). Another perforated staff from Le Placard (Charente) now in the museum at St-Germain-en- Laye, has a pointed end. Both parts of the forked end are strongly emphasized, and one has a deep oval cut upon it (vulva?). It is sometimes thought that the pointed *bâtons de commandement* were used as daggers. It seems more probable, in the total context, that they represent a phallus in conjunction with the perforation. There can be no doubt of the significance of the *bâton de commandement* from the Gorge d'Enfer, with its clear indications of a double phallus at the branched ends of the staff.

The symbol of the two-in-one

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The symbol of the two-in-one can also be expressed by a conjunction of male and female symbols, even by a juxtaposition of the two symbols. A comparatively simple juxtaposition of a phallus in the form of a fish with a diamond-shaped vulva appears on an engraved antler from Lorthet and recurs far later on Mesopotamian cylinder seals.

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Normally such representations are more complicated, and an animal is brought into relation with the sex symbols. Upon one well-known staff found by Peyrony in the rock

shelter of La Madeleine, the presentation of the two-in-one in relation to an animal is described by Breuil as follows: “Head of a bear engraved on a semicylindrical staff . . . in curious association with a phallus in erection and a carefully detailed vulva. The bear is shown with half-open jaws and as though growling” (Capitan, Breuil, Peyrony, 1924, p. 128).

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Breuil further recognizes that, in all probability, this is a representation of fertility rites: “I repeat the observation I have just made, namely that the association here pointed out is probably not fortuitous, and doubtless relates to a whole range of concepts of procreation and initiation customs” (p. 128). Apart from the details described there are others whose meaning is not so clear, but it is astonishing how the action is depicted transparently, almost as though in anatomical section. It is not impossible that we have here a representation of bisexuality; of the desire and demand for fertility raised to its highest power.

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Leroi-Gourhan has compared this staff with a very similar one from Massat (Ariège), with a bear’s head related to a phallus and vulva which are depicted, respectively, as a branching twig and an egglike oval. The position of the bear’s head is almost identical (1958, fig. 2).

Another “dagger-shaped” staff shows that this representational group is closely bound up with fertility rites. This staff, from Raymonden (Chancelade), also displays an animal’s head, this time that of a deer. Its tongue is extended and appears to be licking at a remarkable form which can be variously interpreted. At first the staff was described as follows: “The *bâton de commandement* terminates in a point and could just as well have been used as a dagger. About *6* cm. from the point, which is smooth, two insects are engraved, and then three more along the margin and forming a ring around it. . . . In front is a strange object . . . the tail of a fish . . . or a plant. . . . The head of a deer, turned towards the left, faces it and seems to be licking a leaf and preparing to eat it” (Hardy, 1891, p. 41).

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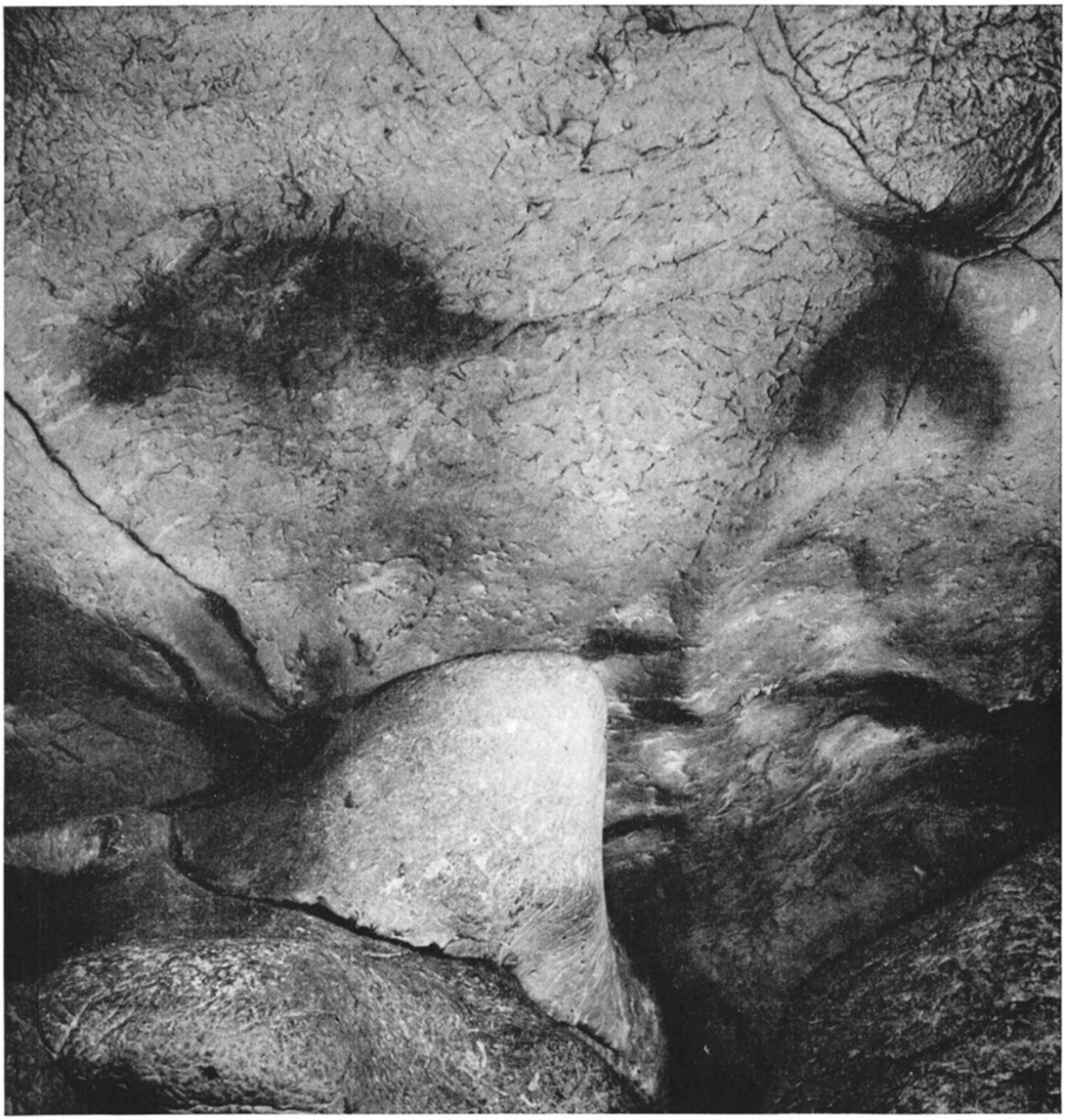
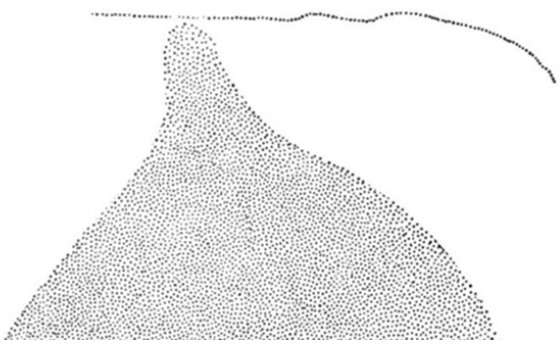
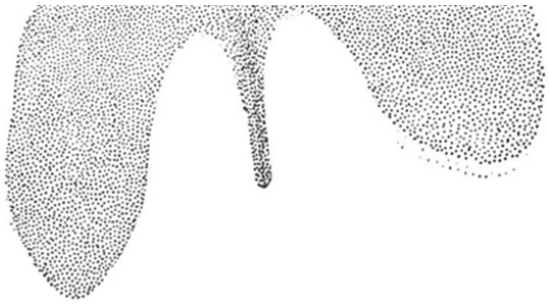
A bâton de commandement was certainly no place for an idyllic pastoral scene of an animal stretching out its tongue to eat a leaf. Also, this has nothing to do with “insects.” A series of completely abstract gazellelike animals shows the desire for an increase of this species of game. Breuil also points out (Breuil and Saint-Périer, 1927, p. 85) that the form probably does not represent a leaf but rather the tail of a fish, which the drawing also resembles more closely. But why only this fish fragment? As Breuil states (p. 130), a fish tail can sometimes represent the female sexual organ. Two fragments of another bone staff from La Madeleine “show a palmate fish tail, less abstract, and, on one of the pieces, accompanied by a perfectly recognizable penis. This relationship

permits one to assume that certain details of the fish tail have been modified to make it into a female genital triangle with a vulva between the curved lines of the belly and the thighs" (pp. 130–31).







158. LE PORTEL (*Ariège*): *Great red symbol* (*right*), *and animal. With drawing of symbol*

The fish as a phallus expressing great fertility would seem simultaneously to be a bisexual symbol: its tail represents a vulva.

229

At Le Portel (Ariège), near the ithyphallic man on a stalagmite, are various indeterminate signs one of which has been interpreted as a bird. But it seems rather to be a symbol for the two-in-one!

234

It is astonishing that the innumerable ideograms of eastern Spanish art —those last notes of prehistory from the iron and bronze ages —are still deprived of any precise interpretation, as are also those similar northern symbols, related to them in type and in time, from Ireland and the high western Alps. But the expression of male and female qualities has been definitely brought out in a number of different figurations. M. C. Burkitt, for instance, shows a short series of representations of the human figure as developed in eastern Spanish art which become similar to a letter of the Greek alphabet (Breuil and Burkitt, 1929, p. 5). But what do they actually mean? What is the meaning of the strongly defined circular form crossed by a vertical line which comes so close to the form of the letter ϕ? Is it really only an abstract human figure? Can it not just as well be an androgynous symbol? Other signs point to the possibility of this as the highest fertility symbol: generator of life, with life endowed.

234, 234, 235, 145

The same questions arise in rock drawings from Clonfinlough, Ireland, usually considered to be stylized human figures. These symbols and others from eastern Spain, the Pyrenees, and the Valais, together with the Egyptian symbol for life, placed in close relation, show closely related characteristics. We are here confronted with the primeval form of the cross, with something cosmic pointing towards the four winds, combined with an oval form or an intertwined extension of the upper part.

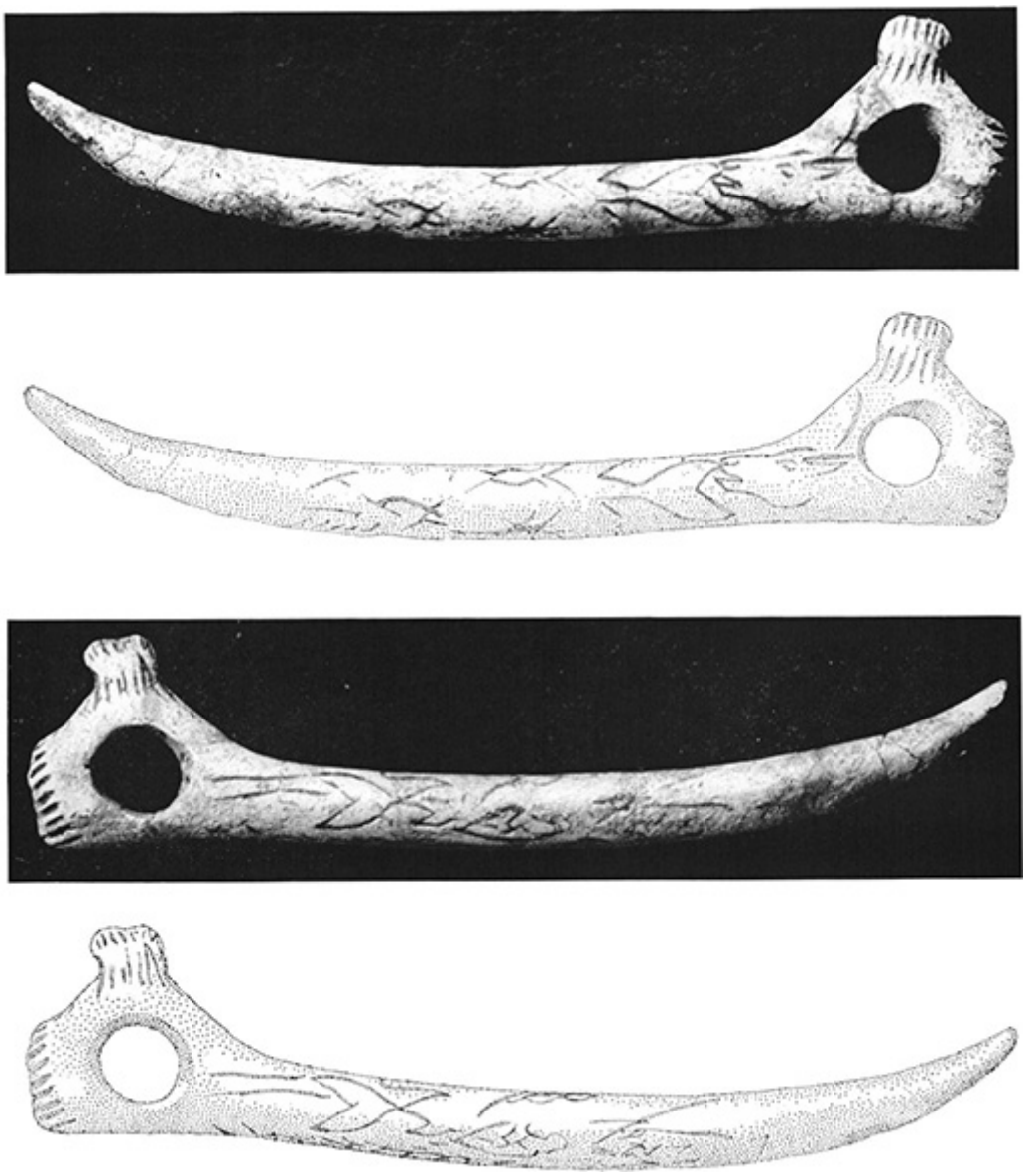
The sign of life

235

Some answer to this question is given by this widely diffused Egyptian hieroglyph for life: the *ankh*. A direct contemporary relationship is obviously out of the question, and it is just as difficult to establish a direct contradiction or confirmation from the general background of neolithic ideograms whose abstract abbreviations formed the basis of most of the hieroglyphs.

159. LE PLACARD (*Charente*): *Perforated staff, the forked lower end strongly emphasized*

"If there is any Egyptian sign about which pages without number have been written, it is certainly the sign ☥ which represents the syllable *ankh* and symbolizes the *idea of life.* Twenty-four different words are derived from the root *ankh"* (Loret, 1901, p. 138). "From the twenty-four different words whose sound includes the syllable *ankh*, fourteen appear to contain the original sense of the root: to have existence, to renew existence, to call into existence. The other meanings, which include 'eye' and 'ear,' seem to have diverted the sense to 'opening'" (ibid., p. 140, based on Brugsch, pp. 238 ff.). One may perhaps note here that the picture of an opening, indeed of an eye, is recognized by some ethnologists as a picture of the vulva (Winthuis, 1928, pp. 9, 219 ff.).



160. RAYMONDEN (*Dordogne*): *Both sides of a dagger-shaped perforated staff, engraved with deer whose outstretched tongue is licking a fish tail. With drawings*

Some archaeologists have taken the sign *ankh* to be "the fisherman's girdle with the loop passing round the waist and the long flaps hanging from it" (Petrie, 1892, p. 33).

Others see in it the laces of a sandal, with a loop which slips round the large toe.

This sign of life may, in its components, be closely related to the prehistoric fertility symbols of vulva and phallus. Its upper part is similar to the heart-shaped form of the Aurignacian symbol for the vulva, which is here combined with an abstraction of the phallus to form a symbol of androgyny— of the eternal renewing of procreation, a union of male and female in which inheres a specially magic power.

BISEXUAL FIGURINES

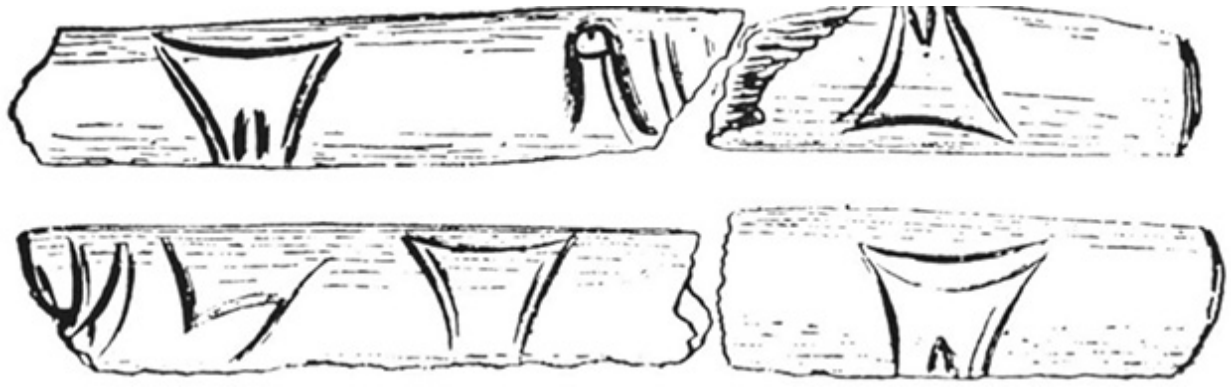
One group of prehistorians considers certain Venus statuettes from the Aurignacian and Magdalenian eras to be double-sexed. Others violently oppose this opinion.

236

The difficulty of arriving at any definite decision is to a great extent due to the very small size of these amuletlike figurines, which are only a few centimeters high. The meaning assigned to individual details easily leads to different interpretations. A 3.7-centimeter Venus from Lake Trasimeno, in central Italy, is assigned to the Aurignacian period. It is a headless steatite figure. According to the way it is viewed, it may be considered to be of either sex. Here the experts are at great odds.

236

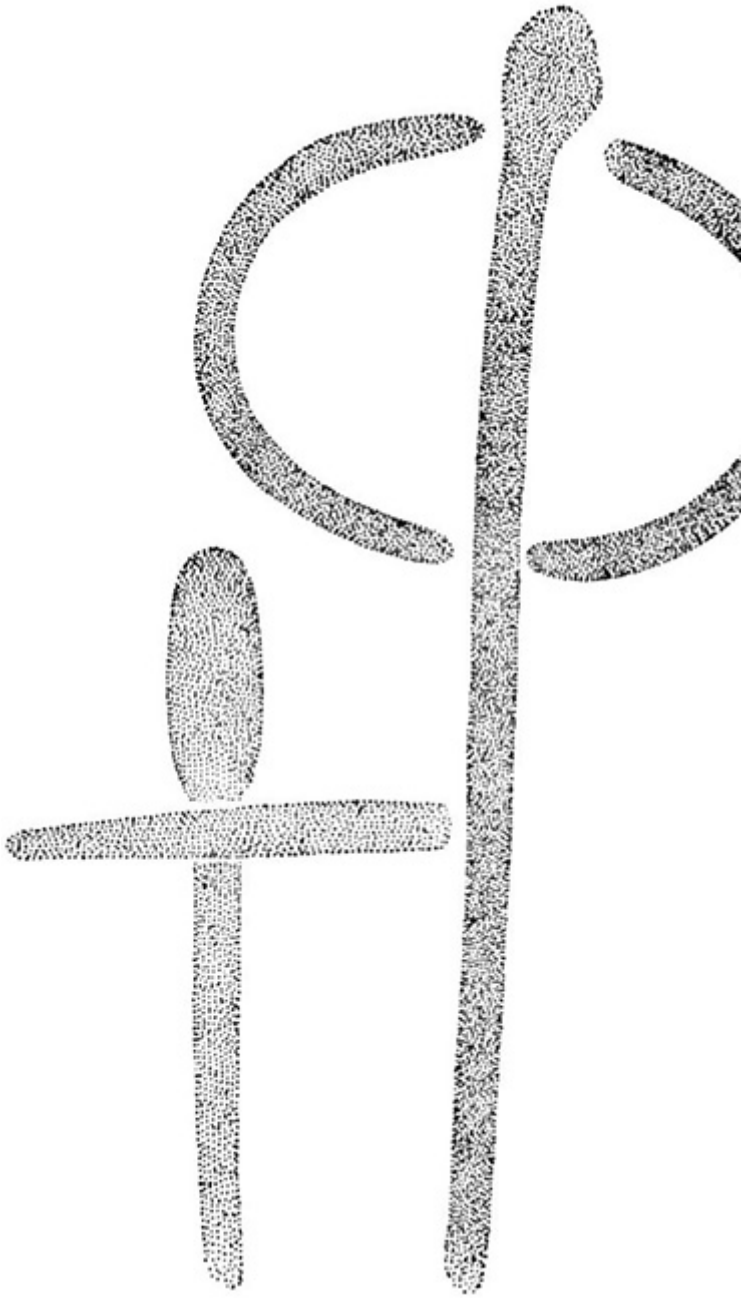
L. Zotz lays particular emphasis on his interpretation of a small (7 cm.) Venus figurine found by him in 1948 in the Weinberg caverns at Mauern (Bavaria). He calls it a paleolithic idol of a bisexual being. The object is without detail except for a pair of strongly molded buttocks, "but what rises from these hips is not a female torso, but . . . a cylindrical peg which resembles the *membrum virile*" (Zotz, 1949, p. 121) . This Magdalenian figure, painted with red ocher, held one way up can represent a female torso; turned the other way a phallus.



161. LA MADELEINE (*Dordogne*): *Fragments of a bone staff, with "fish tails" and a penis. Drawing from Breuil, 1927*

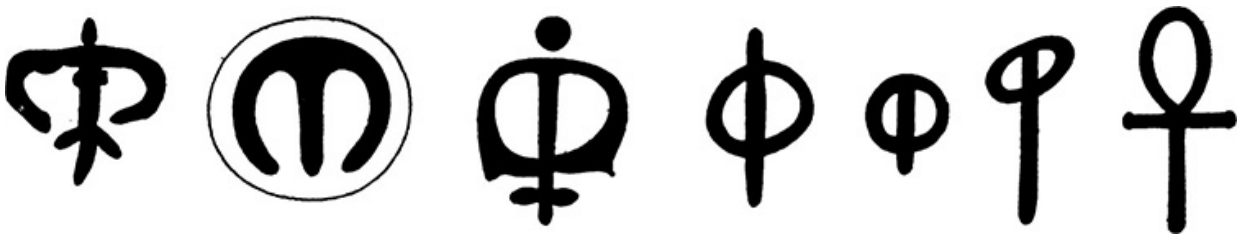
236

Breuil describes a bisexual figure from Pembrokeshire (42 cm.) as a phallic representation in which the two glands at the base of the erect phallus are divided by a deep vertical groove and join "in a 'v' "at the top. The result is that the two symmetrical halves of this *partie évasée* "resemble two female thighs; the 'v' above them also has the appearance of the sexual triangle. This object presents an obvious relationship with . . . other objects recently described by Father Zotz" (Breuil, 1955, p. 184).

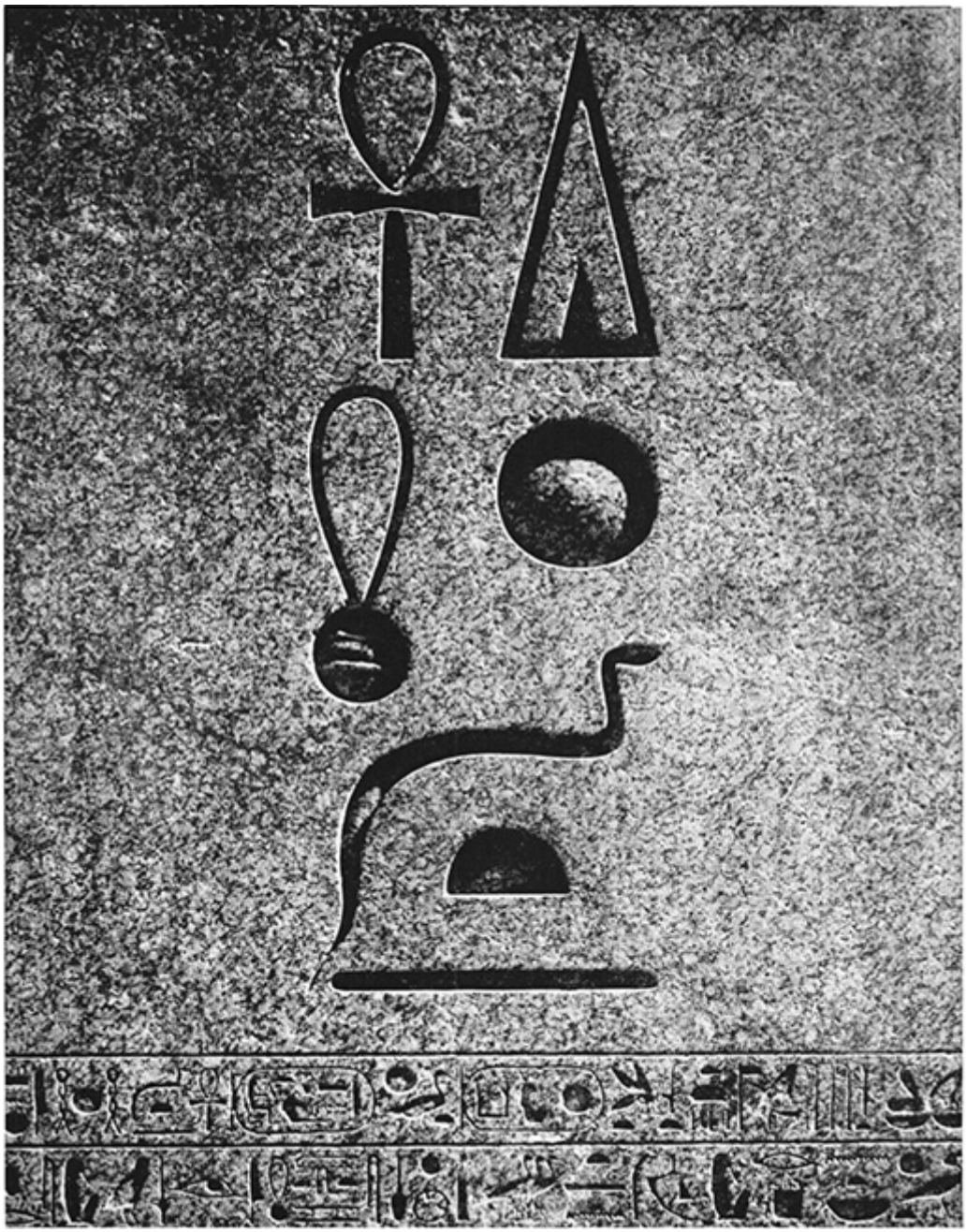


162. CLONFINLOUGH (*Ireland*): *Neolithic rock engravings, natural size. Drawing after Burkitt, 1926*

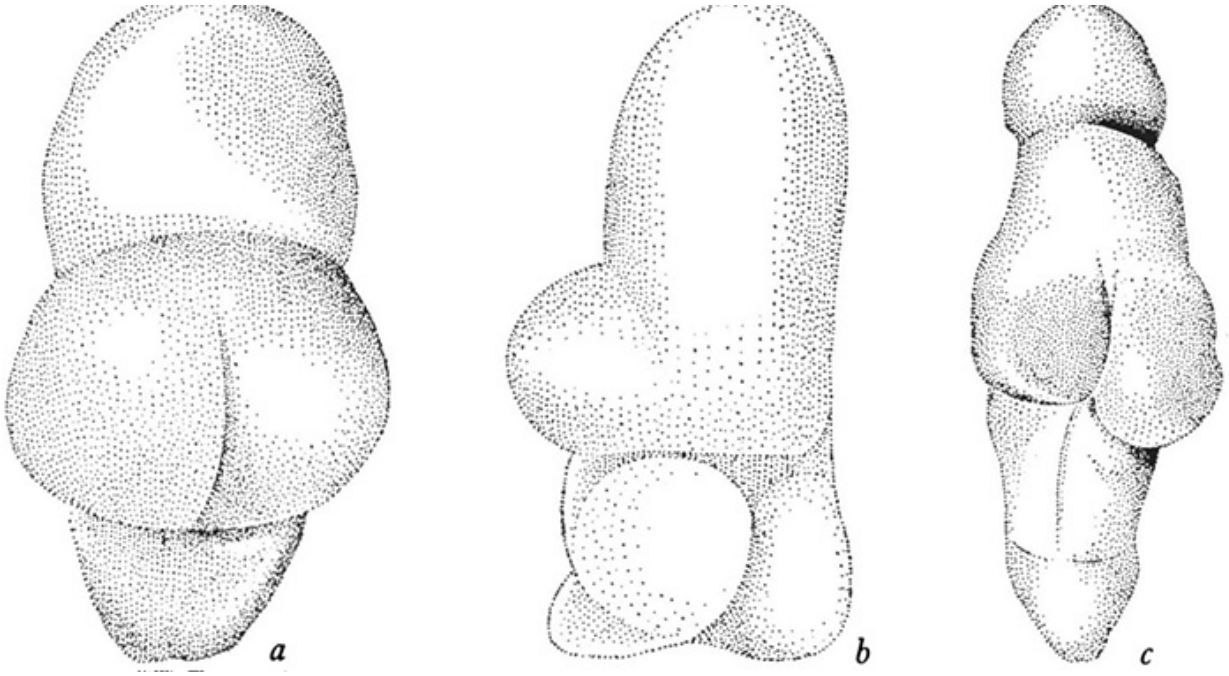
Another figure, excavated by M. Stekelis in the Jordan Valley, is completely preserved and possesses a head. This 6.5-centimeter limestone object is described by Stekelis as "a standing female figure with remarkably distinct indications of sex. The mouth and nose are not marked. . . . The legs are pointed and divided by an incised line in front; below the incised line there are dots all round" (1950–51, p. 12). In our opinion, which is however based only upon the published material, this statuette is also double-sexed, even though (as Professor Stekelis wrote in a letter to the author in April 1957) the eyes and breasts are marked upon the figure. Double meanings are known to be not unusual in prehistory. The combination of female qualities with phallic qualities seems to us to be particularly impressive in the case of this Jordan figurine. It is assigned to the middle neolithic age of Palestine, which Stekelis calls "Yarmukian" after the brook beside which the settlement originally lay. It is dated *c.* 7000 B.C.



163. Symbols from eastern Spain and a) Le Mas d'Azil (*Ariège*), *with b*) *Egyptian ankh hieroglyph*



164. KARNAK (*Egypt*): *Inscription on obelisk of Hatshepsut: "Giving life like Ra eternally"*



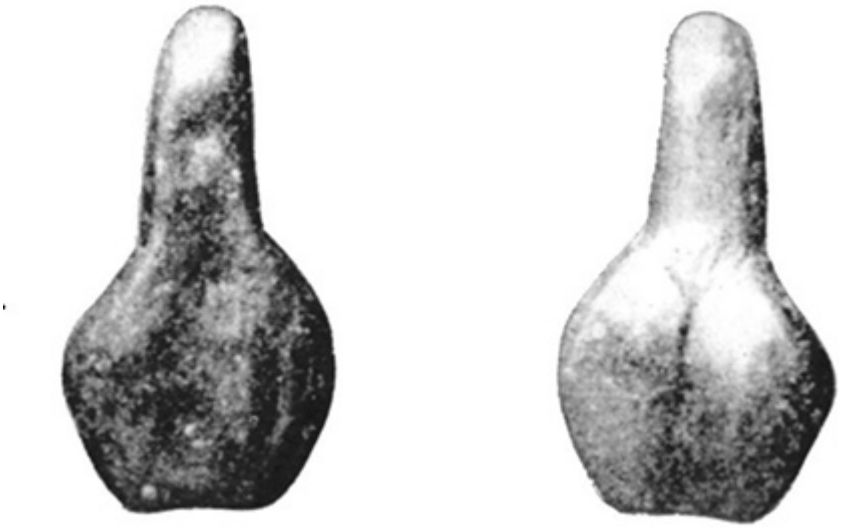
165. Figurines, perhaps bisexual: a) Lake Trasimeno (Italy), 3.7 cm., steatite; b) Weinberg Caverns, Mauern (Bavaria), 7 cm.; c) Jordan Valley (Palestine), 6.5 cm.

Interpretation stands against interpretation. In face of the frequent ambivalence of primeval forms absolute certainty is impossible. It is interesting, however, to note the structural relationship of these curious cult objects which persisted throughout the many thousands of years from the Aurignacian period into neolithic times. It is possible that these, like so many basic types, found their origin in some unknown common source in central Asia and were thence brought into Europe by the Aurignacian people.

The double figure from Laussel

239

In the sanctuary of Laussel (Dordogne), in a very narrow space, close to the celebrated Venus and a number of other female fertility reliefs and sexual symbols, a very strange relief was discerned. It consists of two figures: one is clearly female, but the other, owing to the partial wearing away of the rock, presents a riddle.



166. PEMBROKESHIRE (*Wakes*): *Bisexual figurine* (*4.2 cm.*)

A deeply incised oval outline surrounds the two figures. Only the circular heads project from either end.

Dr. Lalanne, who excavated Laussel in 1908, then described the interlocked figures as follows: "One of the figures is a woman, recognizable by her large, pendulous breasts. . . . The belly is represented by a strong central projection, less strongly marked. The thighs are raised. The arms extend the length of the body and the hands appear to be beneath the lower limbs. The second figure . . . is in an opposite position but symmetrical to the figure already described. Only the chest is carefully sculptured; the rest of the body disappears beneath that of the woman" (1911, p. 258).

What does this scene signify? The indistinctness of the second figure leaves much room for speculation, particularly as to the relation of the two. Lalanne asks whether it can represent a copulation or a birth. Breuil was, in 1911, of the opinion that either interpretation was possible. Boule, Cartailhac, and Lalanne favored the former interpretation, mainly because "the second figure seems . . . too well developed for a newborn infant" (Lalanne, 1911, p. 258). Later Lalanne inclined towards its interpretation as depicting a birth (Lalanne and Bouyssonie, 1941–46, p. 133). Others have considered the relief to represent a single female figure, like the other Venus figures, with the lower "head" as her feet set together (Levy, 1949, p. 60).

Dr. Lalanne's original belief that *two* figures are represented is by far the most acceptable. The riddle lies in the relation of the figures to one another.

We may take it for granted that there are two figures and that they are depicted in a reflected position. The head of the female (upper) one has slight indications of features: a curving form denotes nose and eyebrows; the breasts, buttocks, arms, and legs are well developed; the arms flow together with those of the male partner, who would seem to lie directly beneath her. Alternatively, it is possible that the legs may belong to the lower figure.

This egg-shaped relief of a double figure is without parallel in primeval art; at least it has no direct parallel. No confirming evidence can be deduced from the intertwined figures from La Marche (Vienne) because of the restlessness and incompleteness of their delineation (Lwoff, 1957, pp. 622–33).

240

Only in the highly abstract late neolithic paintings of southern Spain have similar oval forms been found: e.g., in the rock shelter of Sierra de Harana (Granada), where one, painted in red and only 7 centimeters high, represents "a human silhouette, highly stylized, and remarkable for the excessive length of the arms" (Spahni, 1957, p. 612).

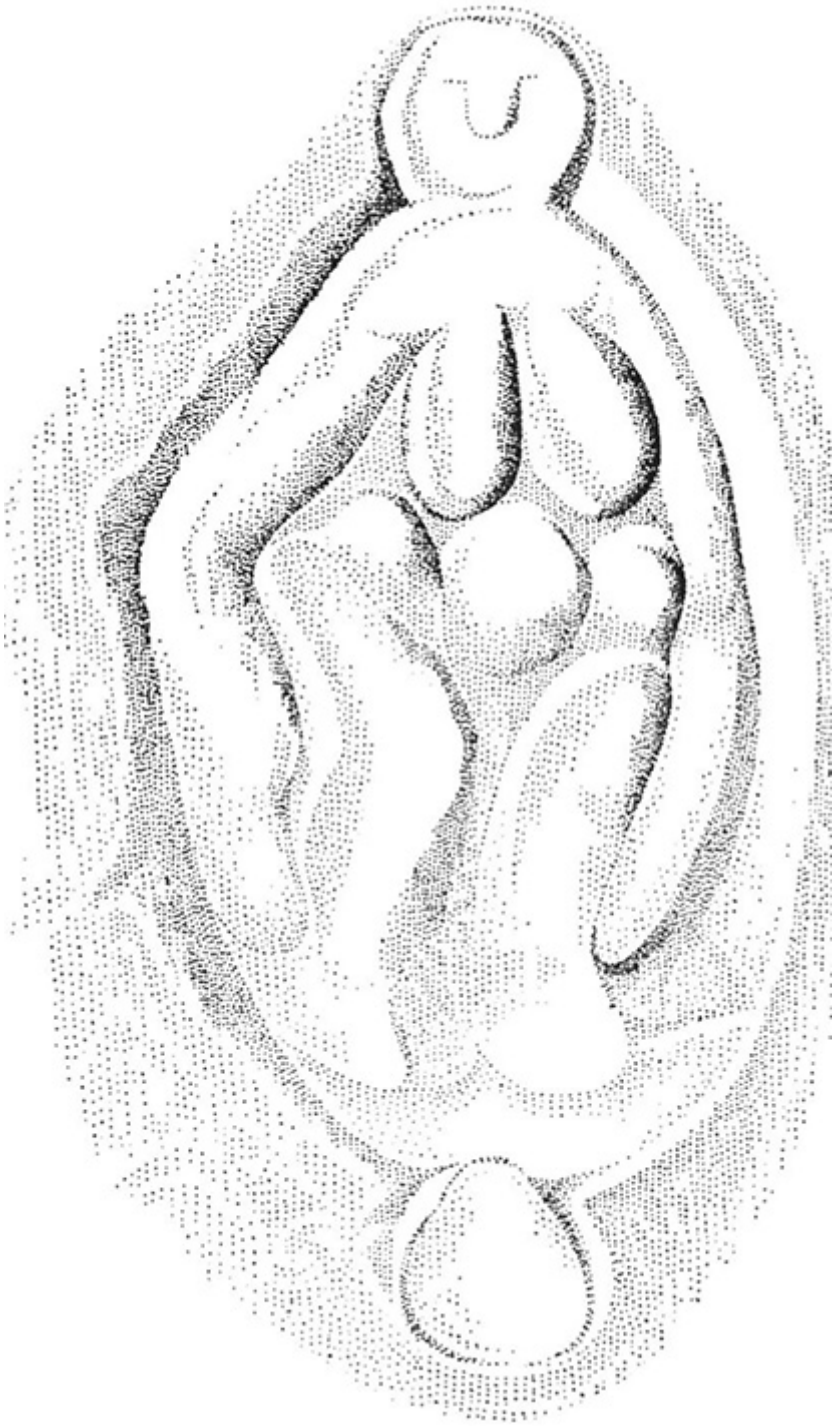
This figure, which expresses so completely the complicated symbolic language of that period, would seem to have a far closer inner relation to the relief at Laussel, and, like that, it can probably be interpreted as a double figure — both figures within a common egg-shaped outline, the heads at opposite ends — especially since Spahni found another similar oval form in the same place, though this time with no drawing within it.

The curious interlocking of the two figures in the Laussel relief might just as well be interpreted as representing an androgynous being. Certainly no clearly depicted androgynous representations have as yet been found in the lower Solutrean, the stratum in which this relief came into view. But a symbol of eternal fertility might well have existed at that time: a double being capable of self-regeneration.

240

Still another riddle is the real significance of a small Hittite stone figure now in the museum of Ankara. It is circular, apparently with two heads on one body, and what seems to be a child seen transparently within, placed in relief crosswise on the circle.

In Plato's *Symposium* there is a description of primeval men who were circular in form and rolled forward like a wheel. This is a highly un-Greek concept, whose origin prior to the Orphic rites is lost in darkness. H. Baumann has recently instanced this passage in Plato's *Symposium* as the best-known documentation of a bisexual myth. For some time now, Aristophanes' parables in Plato's *Symposium* have ceased to be regarded as nothing but poetically satirical fictions. "Here is a myth preserved in shabby garments, which *in nuce* contains most essential features of the ancient bisexual myths" (Baumann, 1955, p. 172).



Drawing for fig . 167

167. LAUSSEL (*Dordogne*): *Double figure incised in rock*

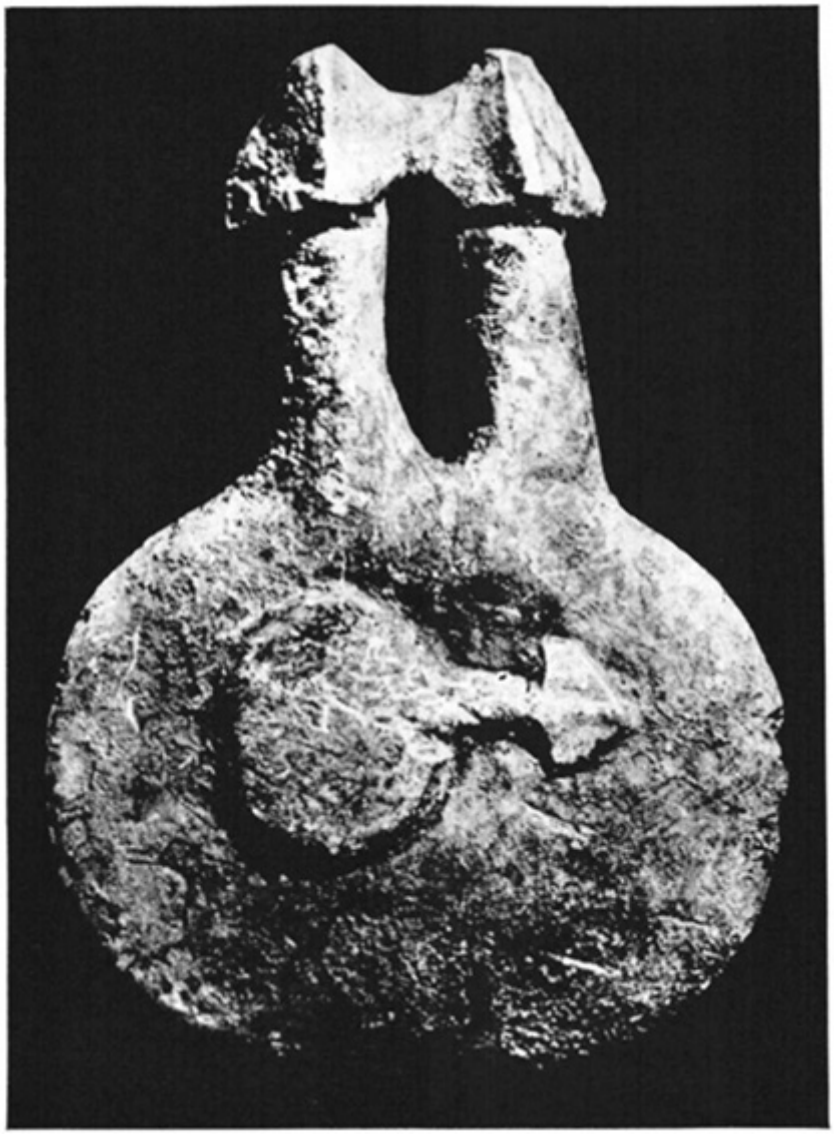
Baumann considered this reference so important that he quotes it in its entire context. Here are a few lines from Plato's text: "For the original nature was not like the present, but different; there was man, woman, and the union of the two, having a name corresponding to this double nature, which had once a real existence but is now lost, and the word androgynous is only preserved as a term of reproach" (*Symposium* 189 E; tr. Jowett).

The entire body of each being was circular: each had four hands, four feet, and two faces looking opposite ways and precisely alike. Early and later conceptions are completely mixed in the language of the *Symposium* and can hardly be separated. When, as Plato recounts, these circular beings made an attack upon the gods and "dared to

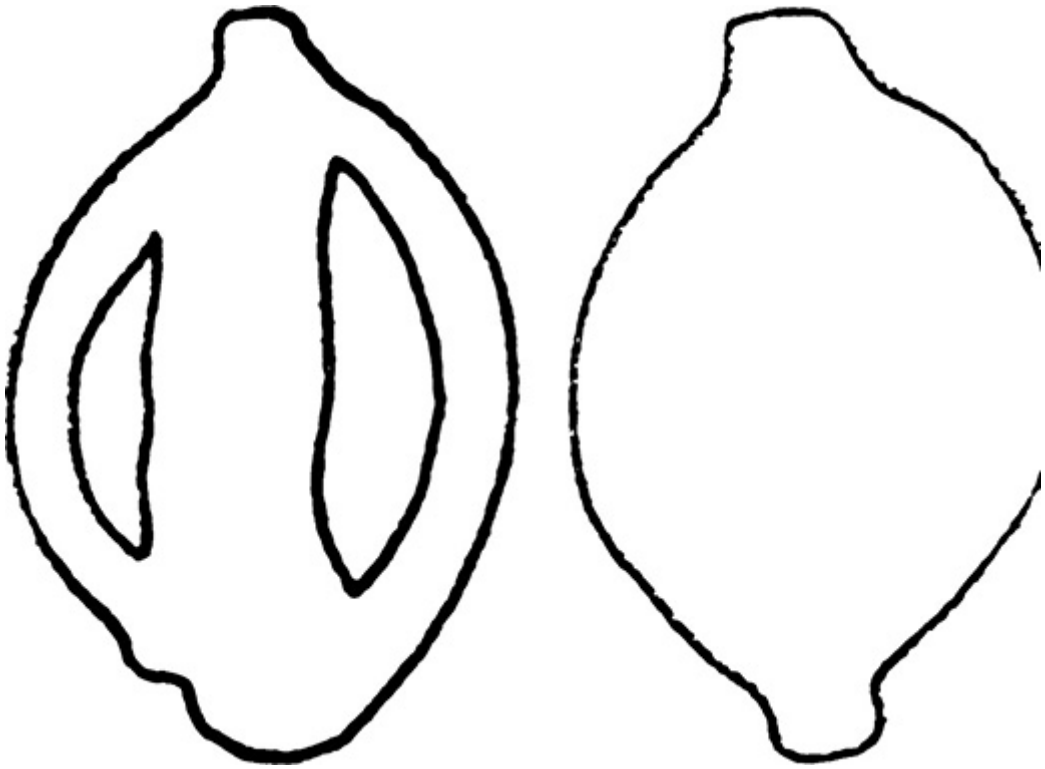
scale heaven" (ibid.) the tremendous force of the two-sexed, two-faced primeval beings was made evident. To subdue them Zeus was obliged to split them in two.

In addition, a connection is suggested between the Plato myth and the Orphic world egg, and astounding parallels to this myth are noted in places as far afield as India, the island of Nias in Indonesia, and the Gran Chaco in South America (Baumann, p. 179).

Whatever the exact significance of the double figure at Laussel may be, all interpretations point to a fertility process. It is quite possible that this curious object represents the earliest manifestation of an androgynous symbol.



168. KANISH (*Hittite*): *Double-headed figure* (*27 cm.*) *with circular body, on which a child's figure appears* (*transparently?*)



169. SIERRA DE HARANA (*Granada*): *Late neolithic red paintings of oval form. Drawings from Spahni, 1957*

THE GREAT SYMBOLS

When we finally enter into the most secret regions of the primeval symbolic world, we are confronted by great abstract symbols which have no counterparts in the world of reality. To us they have no direct significance. They are, as Sartre would have it of modern symbols, forms which appeal to the senses immediately. They impress us, even if we are unable to decipher their meaning. As mysterious emblems quite without counterparts in nature, they have been developed by primeval man whose touch transformed everything into symbols.

256 col, 242, 250, 244

Usually these great figures are hidden away in the most inaccessible parts of the caverns. Nowhere are they more impressive than in the remote recesses of Altamira, El Castillo, and La Pasiega, where they are to be found in composite groups together with chains of dots or other symbols. But they do not appear only in such secluded places. Sometimes they can be seen in conjunction with large compositions.

Like almost all other prehistoric symbols, these *grands signes*, as the French call them, have been given naturalistic interpretations according to their prevailing shape. Thus scutiform is a shape consisting of a quadrangular surface divided vertically into different parts, and claviform one consisting of a line with a protuberance.

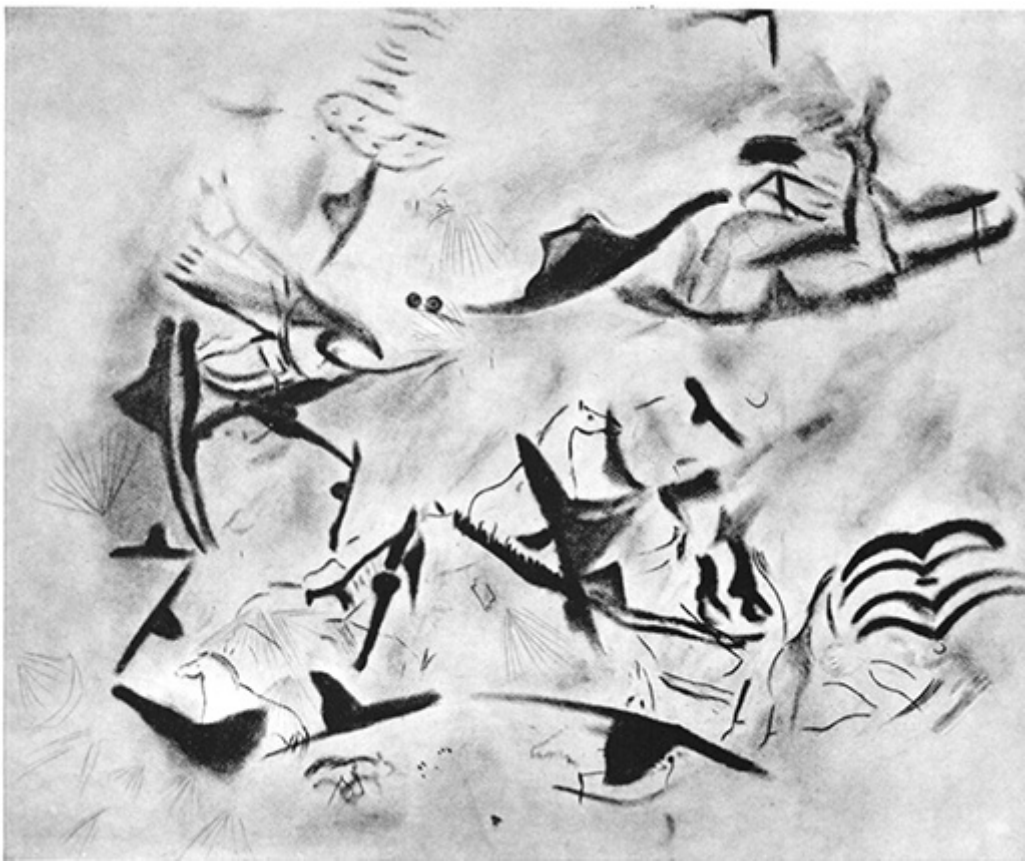
These great symbols were used in many different ways: they were placed in a single position, in isolation; or coupled with animals; or in groups. The categories are not exclusive: one type frequently merges with another. Most of them are painted in red.

At the beginning of the century there arose an eagerness to understand the meaning of primeval symbols. Ethnological comparisons, an explanation of hybrid figures, and the deciphering of abstract figurations were undertaken by Cartailhac, Breuil, Reinach, and others.

245

Research of the kind that Breuil did at that early stage was very helpful in explaining the process of abstraction. An important study by Breuil and Saint-Périer — *Les Poissons*, *les batraciens*, *et les reptiles dans l'art quaternaire* (1927) — dealt with the significance of certain symbols, for instance, the fish as a phallic 230 symbol. Half a century after the Abbé Breuil's first explanation of the process of abstraction, Leroi-Gourhan derived abstract symbols from the genital triangle and the vulva, in the course of a study which included the abstraction of the female figure to its very extreme. This

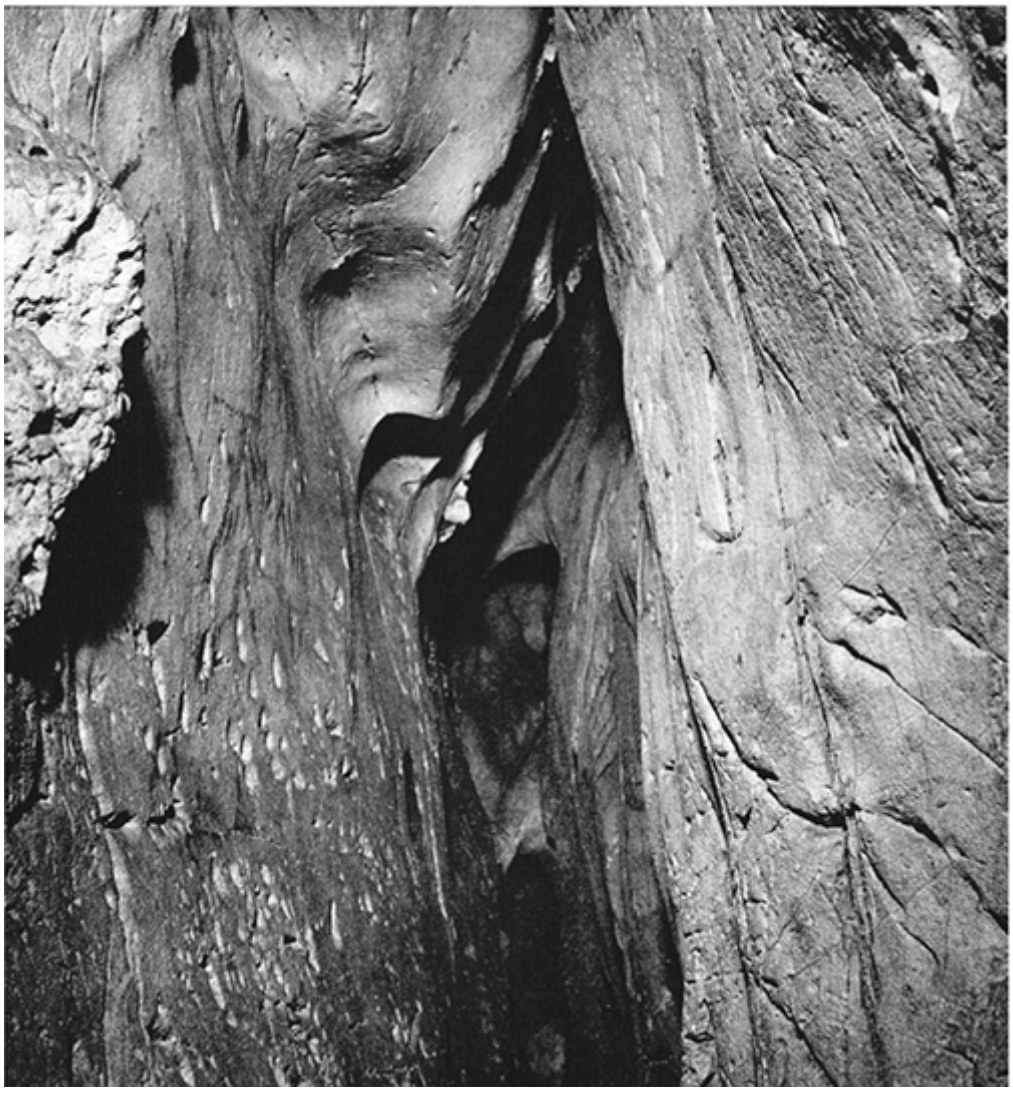
means that research work has been resumed only recently, especially by the French, and that during the intervening time the investigation of symbols was chiefly regarded as too vague a field for serious approach. The interest focused instead upon the evolution of tools and implements, which without doubt were of invaluable assistance in dating the works of art.



170. ALTAMIRA (*Santander*): *Ceiling of the cave reproduced without the polychrome animals, but showing abstract symbols and small horses in black outline. Drawing from Breuil and Obermaier, 1935*

171. ALTAMIRA: *Claviform* (*female*) *symbols from the ceiling. Drawing from Leroi-Gourhan*, *1958*

172. ALTAMIRA: *Scaliform symbol in a gallery cul-de-sac* (*detail*)



173. LA PASIEGA (*Santander*): *Rock cleft with indistinct tectiforms*

Since the first generation of explorers had compiled the material, it is now the intention of the younger French generation to review and organize the vast body of findings and to understand their meaning. Their aim is "first to seek the information from the objects themselves" (Leroi-Gourhan, 1958, p. 307).

355

Two exponents of this line of thought are Annette Laming and André Leroi-Gourhan. The former, in her Penguin book on Lascaux, is concerned with "the positions of the paintings and the various animal groupings and associations" (1959, p. 178). She wants to depart from the "piecemeal method" of comparing individual animals and to view each composition as a whole. She maintains that "paleolithic man's visual reactions were very similar to our own, and he was well aware of the coherent effect of his creative achievements in the chambers and galleries of the caves." The paintings on the walls of the caverns are no fortuitous compositions. They are to be regarded as deliberately planned and arranged designs. "The simplest and clearest example of

planned grouping is the frieze or an assemblage of a single species of animal depicted in one particular style" (p. 179). Then the question arose: is there a recurrence of certain groupings from one wall to another or from one cave to another? "In actual fact, animals of the same species live together, and a bison and a horse can hardly have been a common sight for the palaeolithic hunter" (p. 182). But still, the grouping of horse and bison in Lascaux is recurrent. And not only there, but again and again in numerous other caverns, as the finely engraved horse and bison in Le Gabillou show us. In a Sorbonne thesis (as yet unpublished), Laming states that this juxtaposition of horse and bison or of horse and woman is not accidental, but part of a formula. She proceeds to the rather daring hypothesis that the meaning of the horse is related to the image of masculinity and that of the bison to the image of femininity.

Leroi-Gourhan has undertaken a large-scale program of statistical research by analyzing more than sixty caverns, looking for the location of symbols, the distribution of the different animal species, the percentage of their use, their relation to each other and to abstract symbols linked with them. This has been done by a fact-finding method that can be compared with the punch-card system used by ethnologists to investigate the social behavior of tribes in different regions.

The basic question for him — just as for Laming — is "whether, despite the constantly different disposition of the natural cavities, the ornamented grottoes were not organized sanctuaries. Chronological distinctions in such a perspective are only of secondary importance, because one can imagine that the successive generations of painters and engravers have used the same traditional placements for figures having the same function" (Leroi-Gourhan, 1958, pp. 307–8).

The method he applied in his three important articles of 1958, which will be elaborated in book form, is roughly the following: like Laming he affirms that in the Franco-Cantabrian caverns, which contain most of prehistoric art, a *plan constant*, an ever-present idea, exists, which is faithfully adhered to throughout the periods, despite the difference of topographical setting. He establishes a topographical inventory (*inventaire topographique*). His punch-card system reveals the surprising recurrence of the distribution of symbols and animals.

As a result of this investigation the regularity of ritual organization becomes apparent, and "one perceives that that which remains in the caverns of the ideas of those people who frequented them implies an organization of singular mental complexity and very elaborate religious traditions" (1958, p. 321).

The next step established what *kind* of animals and symbols have been found in certain parts of the caverns. Are they related to each other? Do they show a certain consistency in their use?

The preponderant role of the horse is conspicuous in the great reliefs and compositions of the Magdalenian age, but here it is statistically verified. Besides the horse, the bison and oxen take up a large percentage of the representations. This is quite

natural, since the large herbivorous animals provided the staple food of the ice age people. The mammoth comes next.

190

Leroi-Gourhan's researches reach their most interesting point when he departs from statistics and the punch-card system and tries to penetrate more deeply into the process of abstraction. We have already recounted how he elaborated upon an observation by Bourdier that "a sign in the shape of a herring bone" engraved on a phallic piece of *art mobilier* evoked the tree of life of Mesopotamia (Bourdier, 1958, p. 8). Thus the feather- or plant-like symbols so frequently found in caverns were interpreted as abstract symbols for the male sex.

190, 242, 441, 450

Leroi-Gourhan also traced the process of abstraction to which the female body was subjected until it reaches the simplification of claviforms, which consist of a line showing a protuberance towards the center. "They have been compared to weapons, particularly to boomerangs. Their feminine character would be sufficiently demonstrated by the associations in the wall configurations if, furthermore, there did not exist in *art mobilier* a substantial number of figurines or engravings, about the meaning of which no doubt remains: the engravings of La Roche, the figurines of Mézine, Pekarna, Petersfels, all of which, like the claviforms, are reduced to the axis of the body and the lateral protrusion" (1958, p. 388). This interpretation of these so-called claviform signs may help toward understanding the meaning of the ceiling in Altamira.

Climax of abstract symbols

242

The height of symbolic expression is reached in the caverns of the Cantabrian region in northwestern Spain. Here the climax is achieved, just as the climax of animal painting is found on the ceiling of Altamira. There are no definite indications to show us exactly at what point these large symbols came into being, but they should decidedly be dated rather late — judging from their relation to the bisons on the ceiling of Altamira, even if they had been painted earlier.

Among the many abstract symbols the weaponlike or female claviforms and the tectiforms are the most striking.

Claviforms as a female symbol?

242

In an expertly colored picture in the second edition of *The Cave of Altamira* (Breuil and Obermaier, 1935, pl. VI), the ceiling is shown without its polychrome animals. It lends insight into the richness and strength of the symbolic world of the Magdalenian age. At

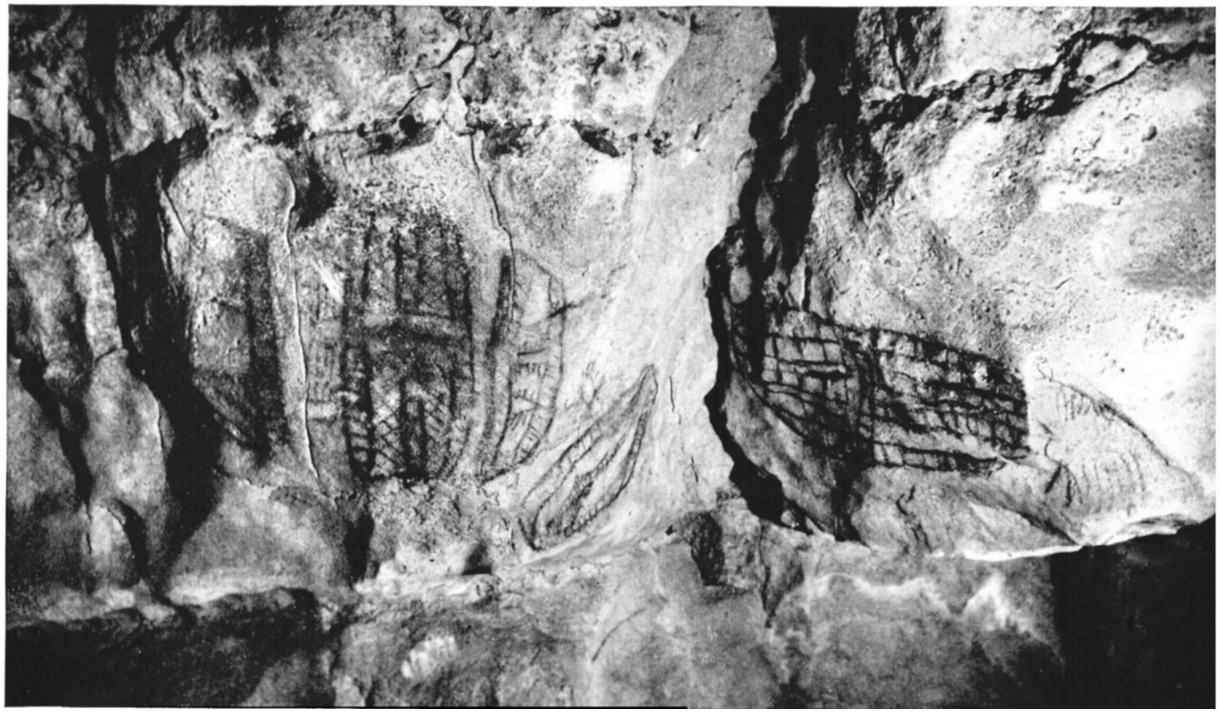
first glance the many claviform symbols dominate. Only later the black outlines of small horses and the thinly engraved hutlike signs appear.

The claviform shapes differ individually, but they all belong to the same family. They share a round or triangular protrusion between the two ends. Rather than weapons or female bodies, they may be symbols of fertility or procreation, like the profile types of the Venuses.

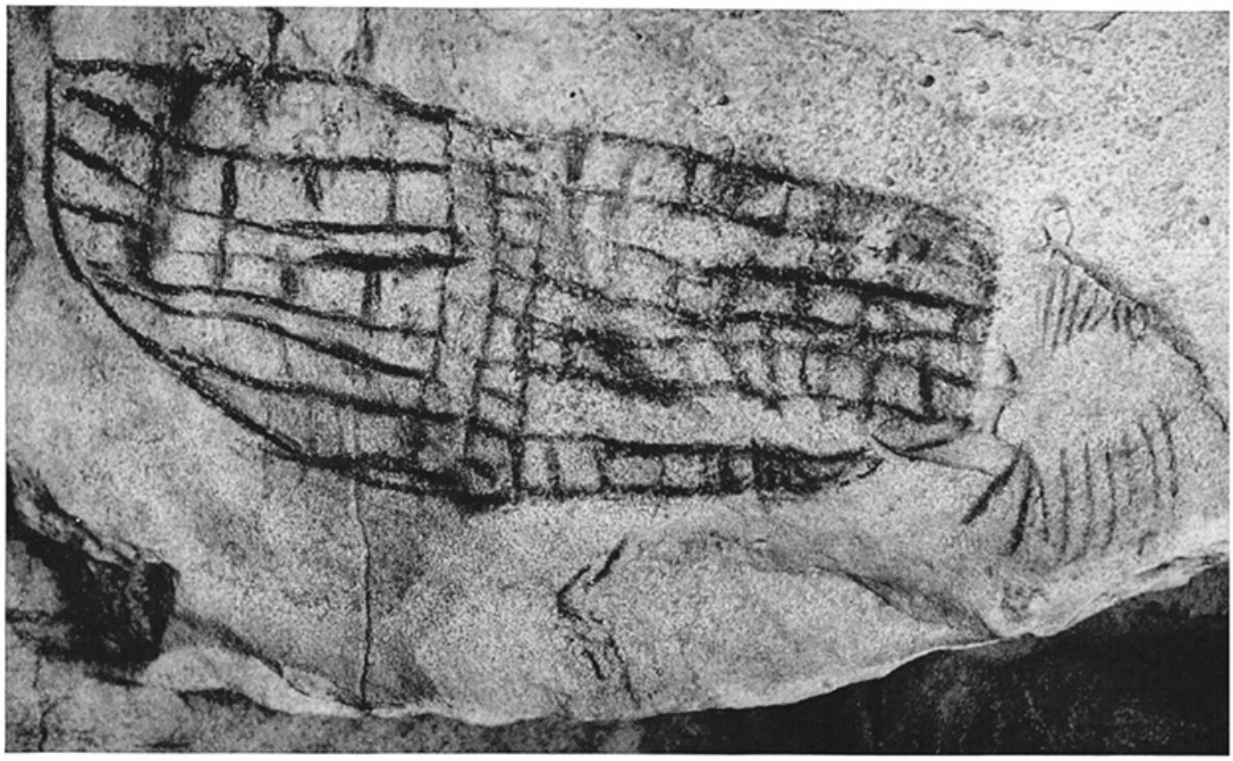
424, 267 col

The most striking of these shapes is the large red double symbol at the left, which we have already encountered several times. It is painted between the big hind and the pale bison and strongly attracts the spectator's attention. Its two parts consist of the claviform sign and a parallel line, as in a smaller symbol at La Pasiega. Joined to it is a large irregular X-shape, which at the moment defies explanation; perhaps it is composed of two sexual symbols.

Much less obvious are the thinly engraved lines radiating from one point. They appear in many caverns. Here — like the female symbols — they spread in all directions. First they were regarded as tectiforms, but these cometlike bundles of rays are, in their shape, related to the penniform signs, which represent the male element. This repetition of sexual symbols makes sense in a ceiling devoted so extensively to the evocation of fertility.



174. ALTAMIRA: *Group of tectiforms in the final recess*



175. ALTAMIRA: *Detail of tectiform, second from the right*

176. ALTAMIRA: *Another detail of the same group*

244

In a letter (Oct. *6,* 1959) Graf C. Vojkffy, hunter and authority on prehistoric fauna, writes to me of his thoughts on reading Ortega y Gasset's prologue to a book by the Conde de Yebes (cf. Ortega, 1947, VI, pp. 419 ff.): "When he [a friend of Ortega] and a farmer visited an exhibition of [reproductions of] the paintings of Altamira in Madrid, the farmer exclaimed: 'How beautifully this cow gives birth to a calf! 'Whoever like myself has seen bovines give birth in the open air will say the same. . . . I was the first to prove that the cows of Altamira are not 'ramassées,' as Breuil suggests, or 'gestürzt' [fallen down], as has been claimed by German scholars, but they are *in the act of giving birth.* This is *important for the understanding of the full meaning of these paintings.* The hind is *big with young* — therefore all this has the significance of the magic of procreation. The religion of those days did *not* elevate the animal to the position of a god . . . , but it was *humbly entreated* to be fertile."

177. EL CASTILLO (*Santander*): *Groups of tectiforms on the very low ceiling* (*85 cm. high*)

These few remarks underline the concepts developed throughout this book.

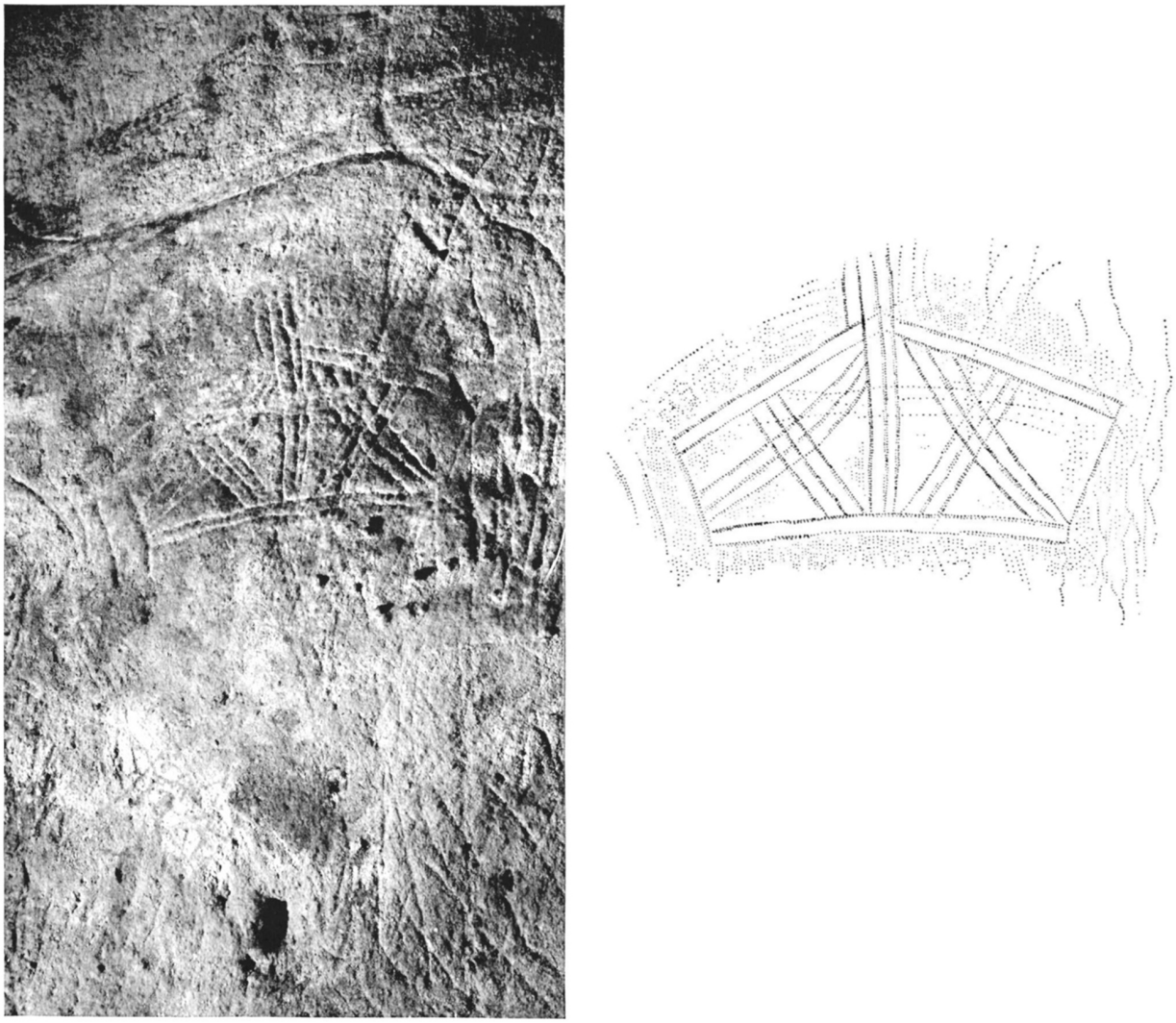
Groupings of tectiforms

The groupings of large tectiforms in the innermost recesses of caverns are most predominant at La Pasiega, Altamira, and El Castillo. At La Pasiega they are to be found at a point where the walls of the cavern narrow to form a close cleavage of rocks. This indicates how these signs were regarded as highly secret ritual objects. On the walls, and especially on the right one, fragments of tectiforms can be vaguely discerned.

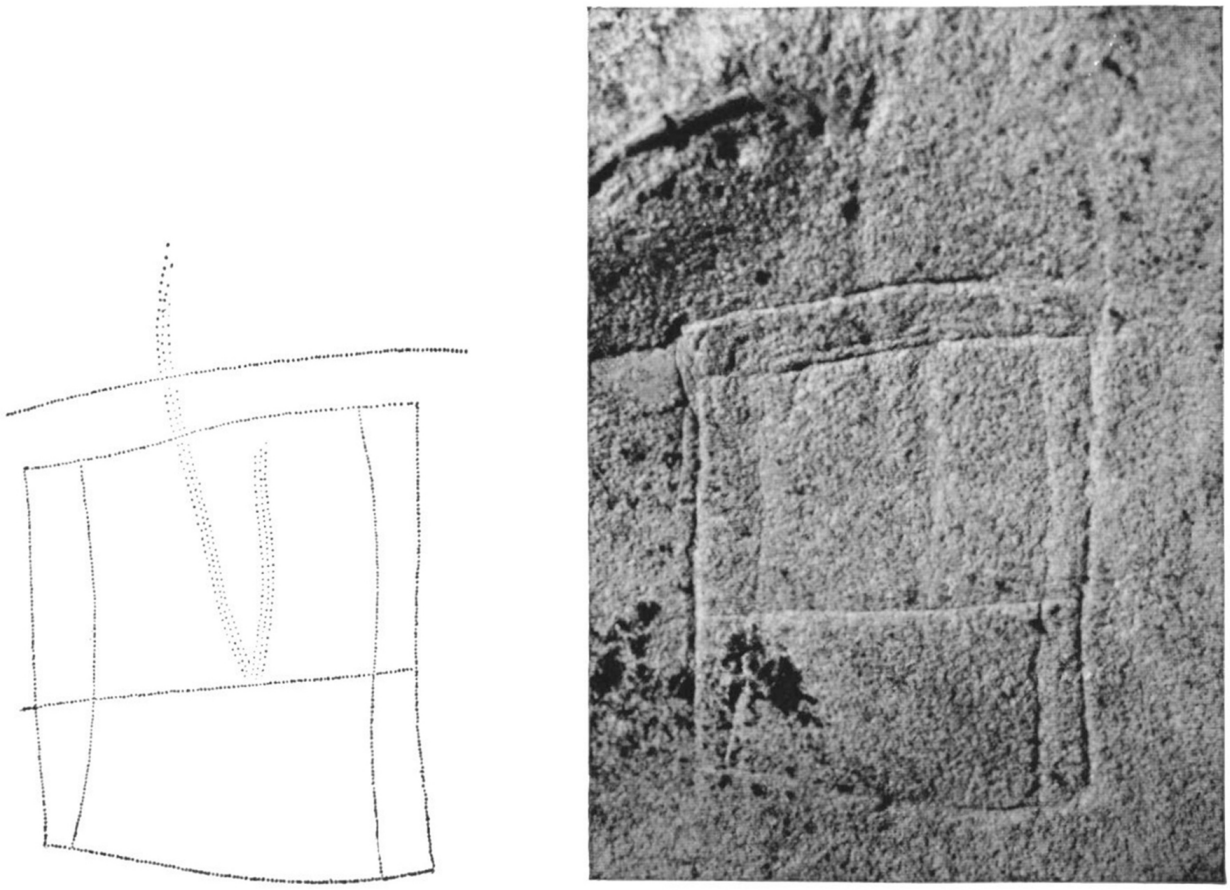
256 col, 248, 249, 248

Besides the free-climbing scaliforms in the gallery of Altamira, which follow the natural structure of the rock without assuming any firm shape, there is, in the final recess, just before the two masks at the end of the cavern, a grouping of black-painted tectiforms of the ladderlike type. They are of varying shapes and are accompanied by small rectangular and ovally radiating symbols. The craftsmanship is less perfect than that of El Castillo. Our detail shows a rather irregularly shaped tectiform (the second from the right), which was first believed to be a house with two decorated pillars.

178. EL CASTILLO: *Red symbol on the Wall of Hands*



179. FONT-DE-GAUME (*Dordogne): Straight-line tectiform, high up on rock wall. With drawing*



180. LE GABILLOU (*Dordogne*): *Latticed symbol. With drawing*

250, 257 col

Of all the caverns El Castillo has the most impressive group of tectiforms. The , ceiling in the recess containing these symbols is only 85 centimeters high. All symbols are well defined and drawn with vigor. Several rows of red dots range between them and on the wall extend into the low ceiling, which forms a sharp angle with the wall. The three tectiforms on the left of the figure measure 65, 25, and 50 centimeters respectively, from left to right.

251, 37

Red symbol on the Wall of Hands, *El Castillo:* Close to the ground in the cave of El Castillo there glows a red symbol on the Wall of Hands, together with other symbols, animals, and hands, which are faded in coloring and therefore rather blurred. Its basic form, three broad parallel curves, corresponds to the crescent-like tectiforms found in the recess of El Castillo, but here we find it developed to a more advanced stage. The shape in the center is the broadest and — like the one on the right — consists of solid color. The one on the left can perhaps provide some hint as to which period it belongs. It consists of a broken line which twice changes its direction to resemble a winglike form. Again, but now with great precision, short comblike lines without a border spring out in the manner which, later in the mesolithic period, will become familiar in the rock

shelters of eastern Spain. Their significance is uncertain, here as well as later — and even in the ceramics of Susa (4th millennium), with their comblike birds.

Not only because of the freshness of the color, but also because of the development of the entire shape, this red symbol should be placed at the utmost end of the period of tectiform development.

The meaning of the *grand signe* still waits for an explanation. Whatever their sense may be, these symbols seem to express something other than the relationship between male and female.

Symbols with approximately straight lines

Of all the abstract symbols only the two most impressive have been dealt with here, the claviforms and the tectiforms. They are, however, only two examples of the multifarious symbolic language of prehistory.

Symbols with more or less straight lines, approaching the form of a rectangle or checkerboard pattern, compose another class. They are sometimes called scutiforms, "shield-shaped." Thirty were counted in Lascaux, distributed over different parts of the cavern. Several are polychrome and engraved. These latticed signs are called blazons. Their significance, which once again evades us, has nothing in common with an actual coat of arms. The lines of these blazons are not really straight, nor do they meet at exact ninety-degree angles. They do not resemble the strict horizontals and verticals in Mondrian's paintings. Their character is far more closely related to the flowing lines in the paintings of Paul Klee — as in *Blühendes*, in which he expresses the idea of growth and flowering.

252, 429

These latticed signs are to be found in many caves. One of them, from Le Gabillou, may serve as an illustration. Sometimes the polychrome latticed symbols are related to an animal. The hind hoofs of a large cow which is the central figure of the nave of Lascaux are thrust into such a pattern (Breuil, 1952, col. pl. p. 119). A similar relationship between symbol and animal exists on the ceiling of Altamira, where the old bull is standing in one of the large red symbols which had been painted earlier.

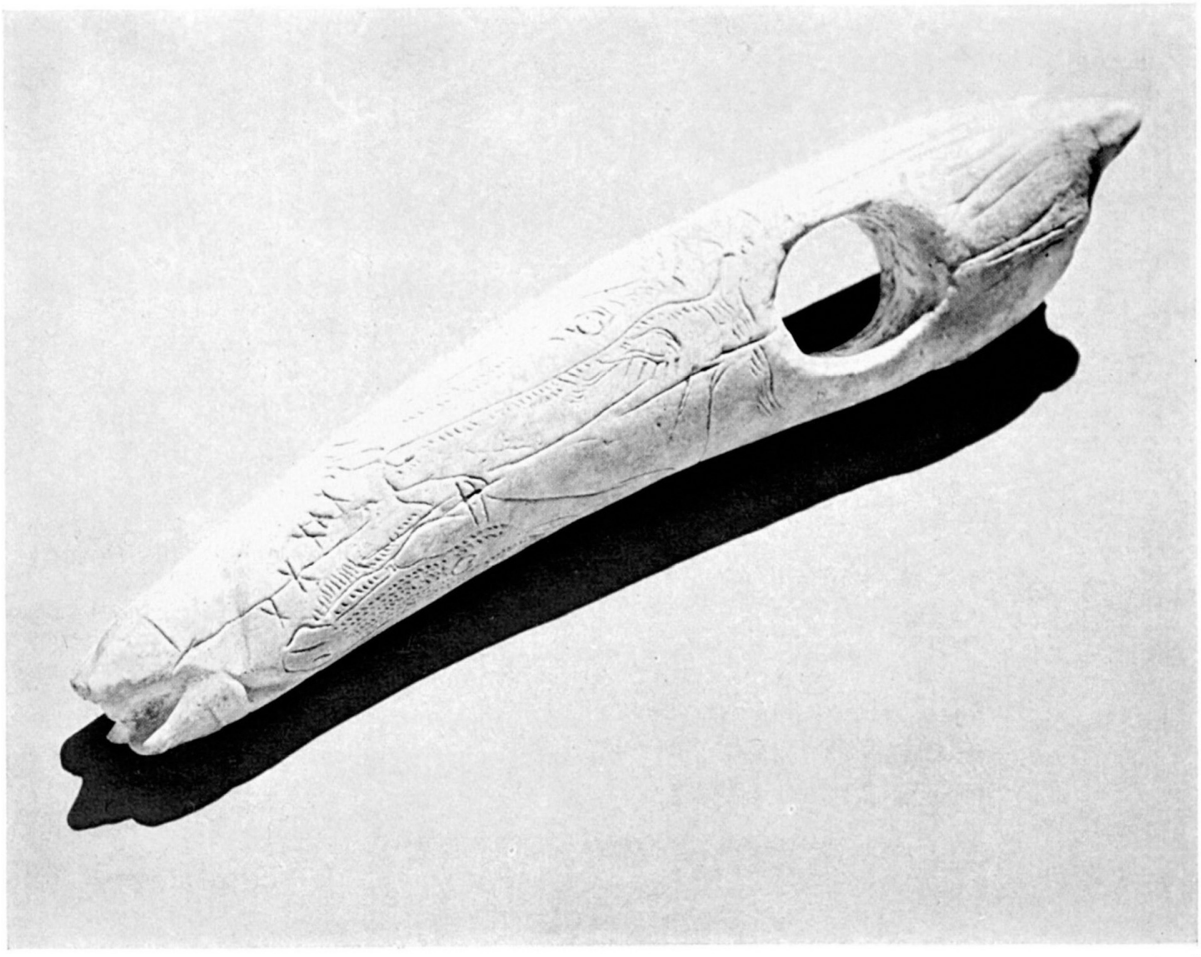
252, 262 col

The tectiforms of Font-de-Gaume also belong to the class of symbols with more or less straight lines. The name tectiform may have had its origin in Font de Gaume's hut- or house-like symbols. They are sometimes placed in complete isolation, high up on the rock wall where they are difficult to reach. One of them has a sloping "roof," inclined "walls," and a "pillar" in the middle which extends beyond the roof. It is understandable that these elaborate "constructions" were regarded as magic traps for large animals, but it is very doubtful whether they had anything to do with houses or traps. It is not even certain that their clearly defined form has the same meaning as the

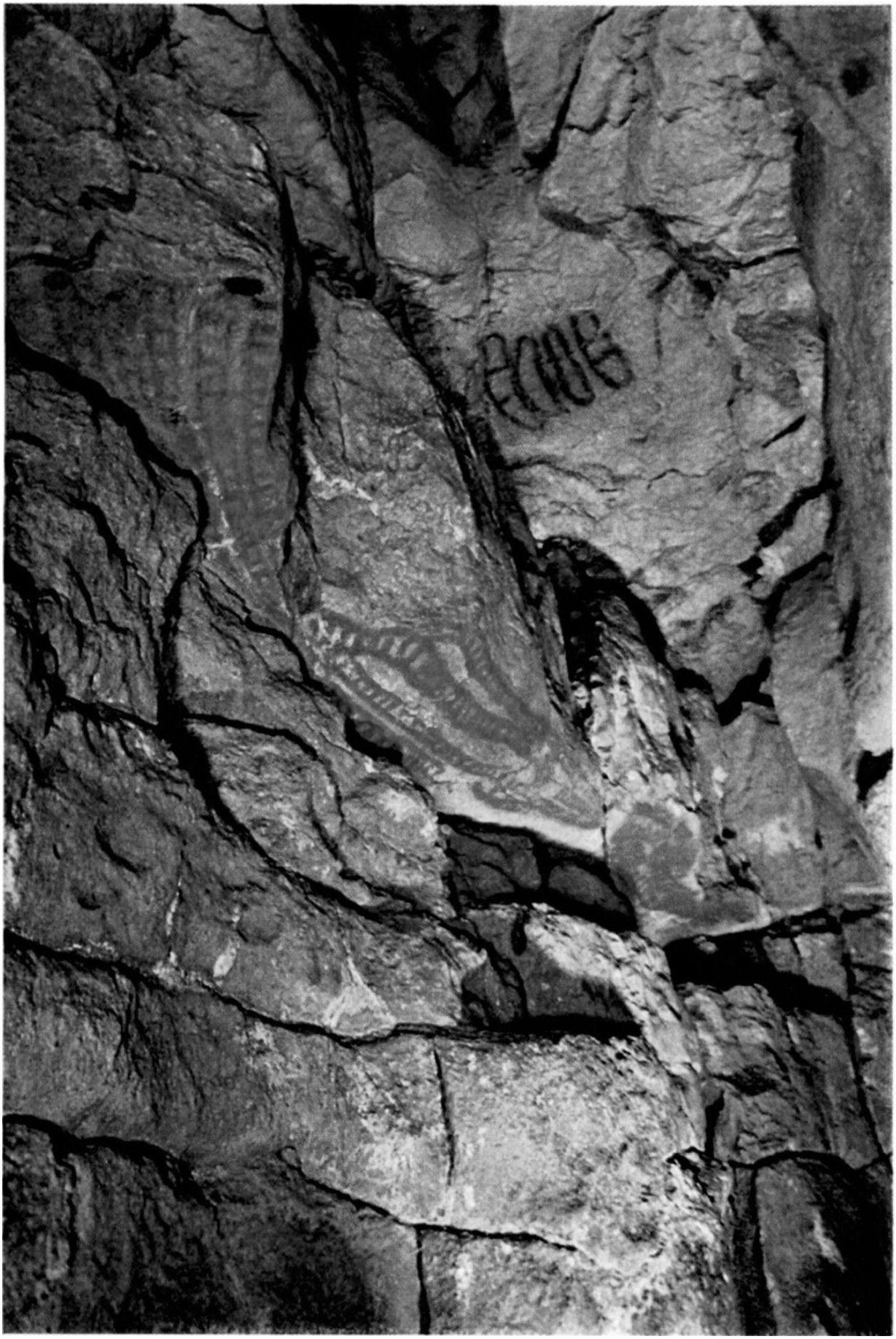
curved tectiforms of El Castillo or Altamira. These are assembled in groups, interspersed with other symbols; those of Font-de-Gaume are placed in isolated positions.

The bold assumptions, on the other hand, that the straight-line tectiforms of Font-de-Gaume are a combination of a vertical penniform male symbol and the female symbol are not easy to accept. Leroi-Gourhan sees in both symbols — the straight ones of Font-de-Gaume and the curved ones on the Spanish caverns — "la fusion complete des deux symboles": the complete fusion of two symbols, the male and the female element (1958, p. 388).

Fertility and procreation are the chief motifs of primeval symbolism. Man's struggle for survival was never again expressed in such sublimated forms. But there is not enough convincing proof to attribute a male or female character to the assembly of tectiforms in the secret locations of the Spanish caverns. It may be better — for the moment, at least — to let the meaning of these abstract configurations remain undetermined.



I. EL PENDO (*Santander*): *Late Magdalenian perforated staff with animal heads* (*cf. p. 167*)

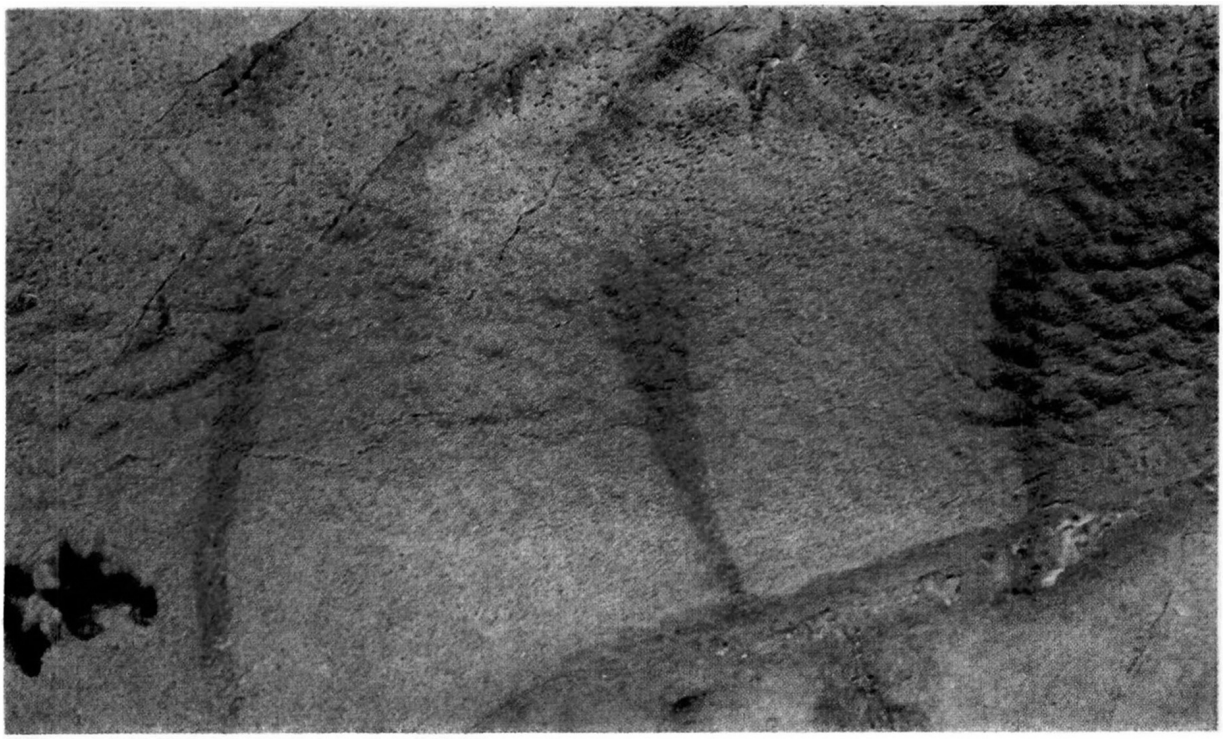


II. ALTAMIRA (*Santander*): *Scaliform symbols in a recess of the main gallery* (*cf. p. 251*)

III. EL CASTILLO (*Santander*): *Tectiforms and other symbols* (*cf. p. 253*)

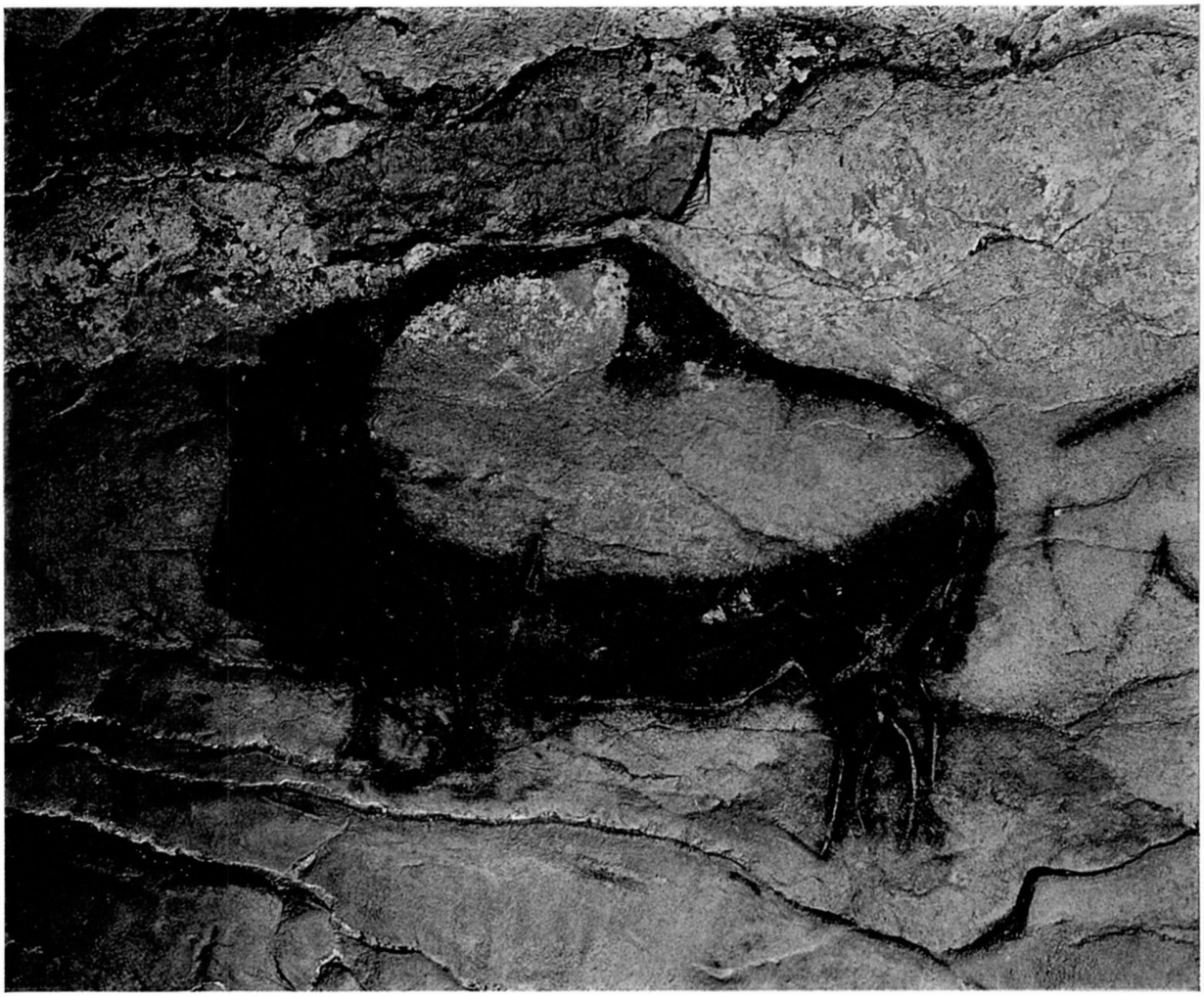
IV. PECH-MERLE (*Lot*): *Painted boulders*. *Left, abstract bison, abstract figures, mammoth, and dots (cf. p*. 25). *Right, red-encircled hand surrounded by dots* (*cf. p. 258*)

V. GARGAS (*Hautes-Pyrénées*): *Wall with hands encircled in red and black* (*cf . p. 99*)



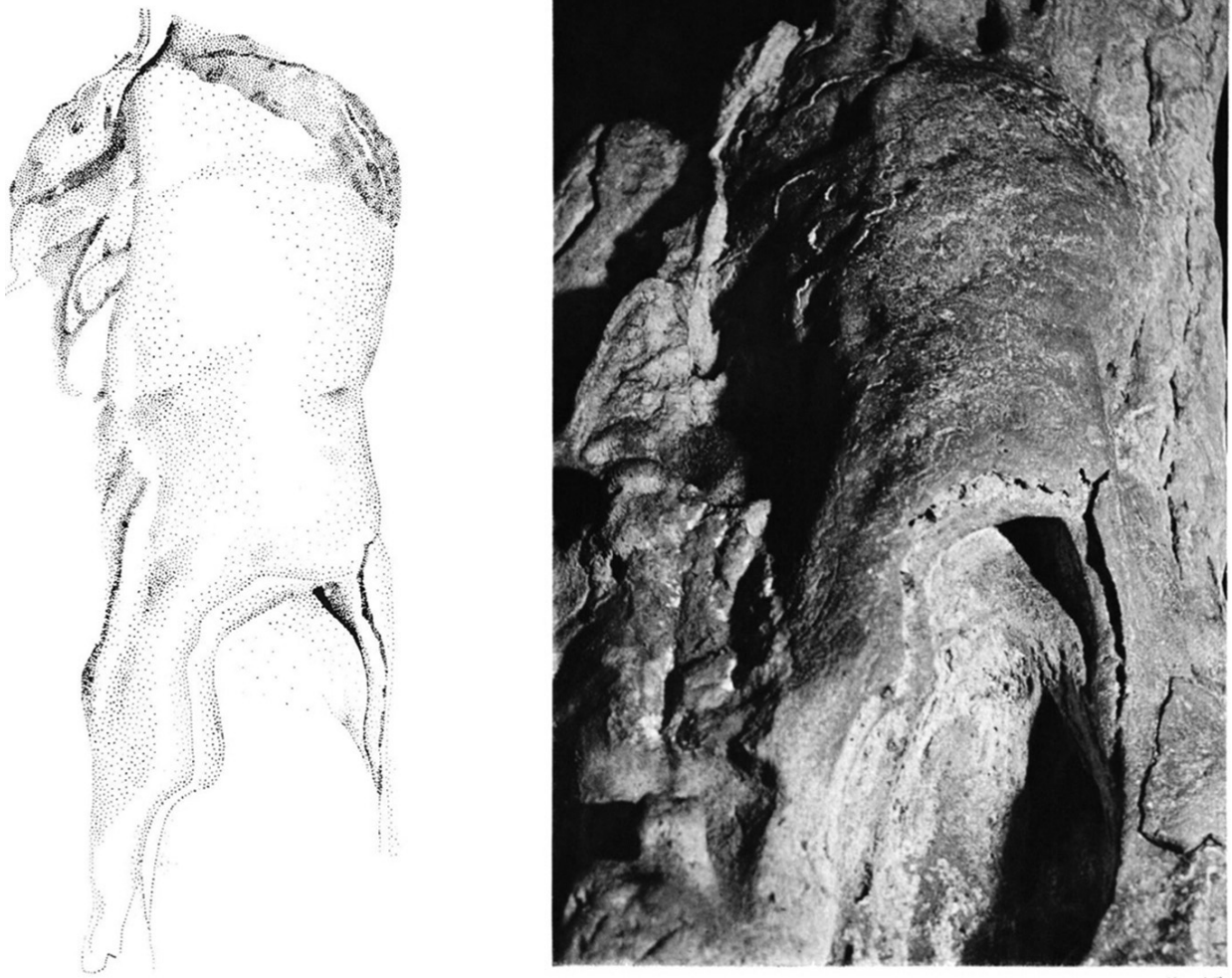
VI. SANTIÁN (*Santander*): *Abstract symbols of hand and arm* (*cf. p. 110*)

VII. HORNOS DE LA PEÑA (*Santander*): *Horse engraved in clay: detail of head (cf. p. 332*)



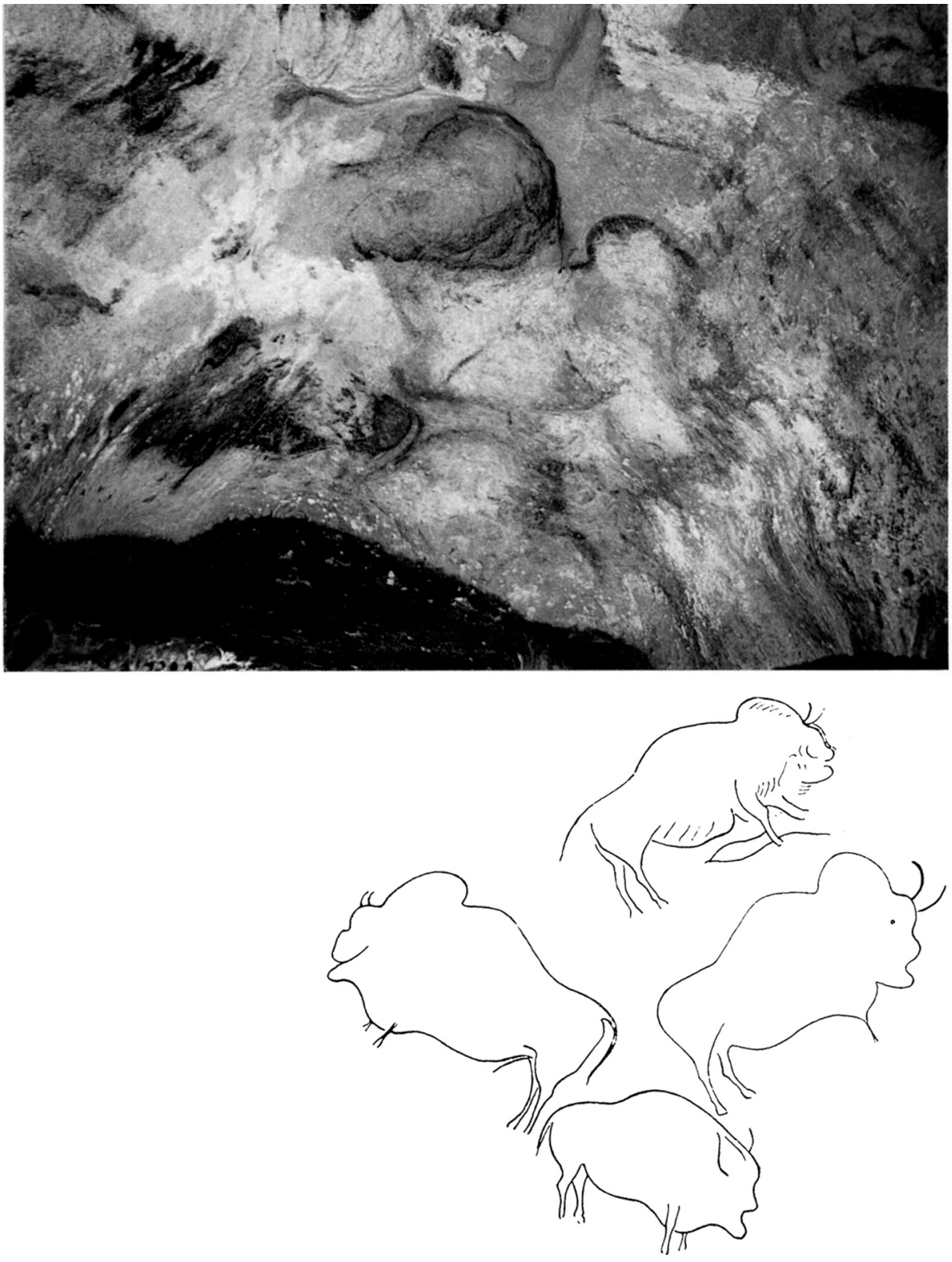
VII. LE PORTEL (*Ariège*): *Black-painted bison, in the Galerie Breuil* (*cf . p. 365*)

IX. FONT-DE-GAUME (*Dordogne*): *Polychrome bison and tectiforms. With drawing* (*cf. p. 254*)

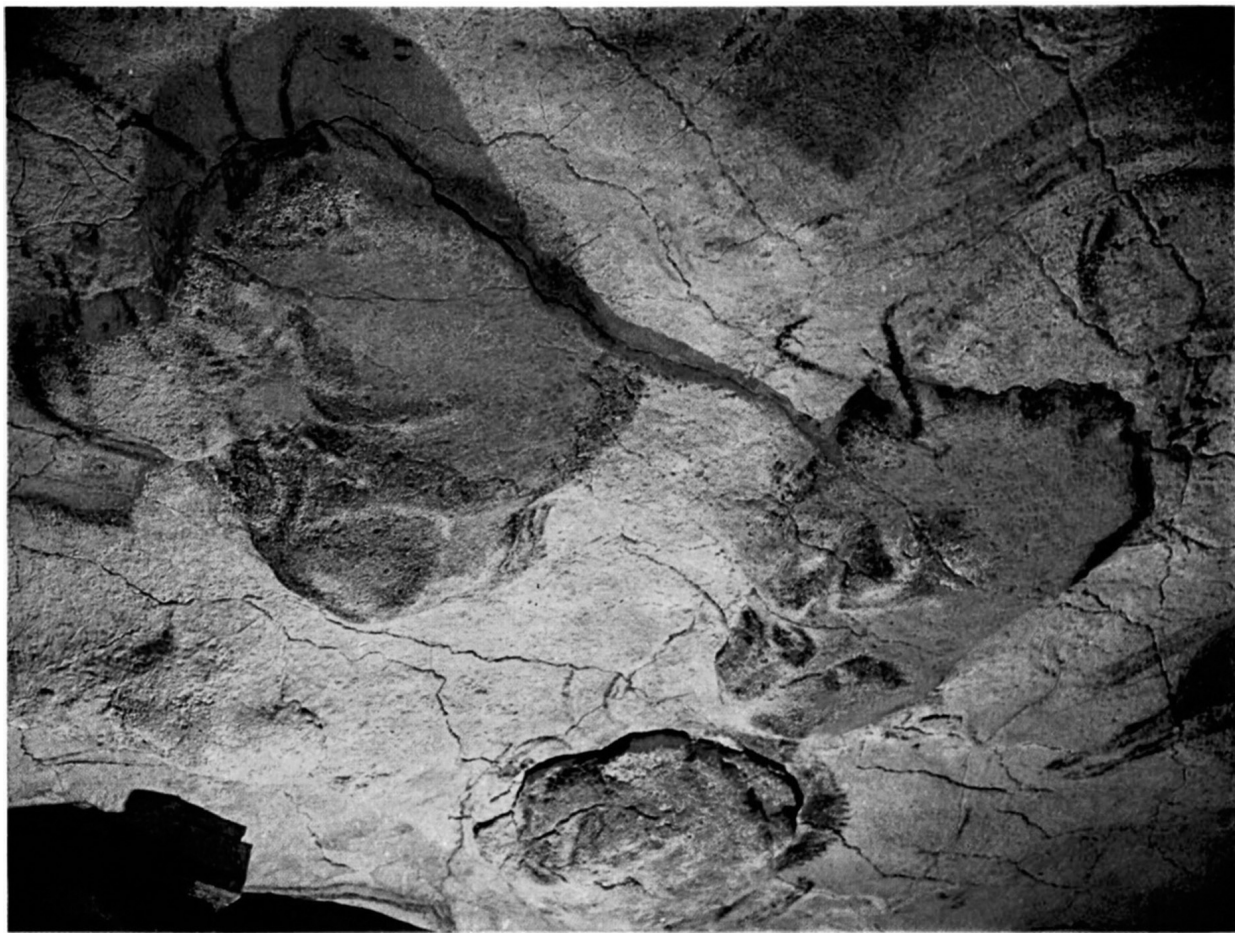


X. EL CASTILLO: *Bison painted on stalagmite. With drawing* (*cf. p. 531*)

XI. LASCAUX (*Dordogne*): *Bovids and horses on ceiling of axial gallery, including "leaping" cow and "Chinese" pony* (*cf. p. 415*)



XII. FONT-DE-GAUME, *Chapel of the Bison: Four bison painted in a natural rock hollow. Breuil's careful drawing indicates the actual forms, which are distorted by the camera. The head of the topmost bison is foreshortened by the curving rock* (*cf. p. 420*)

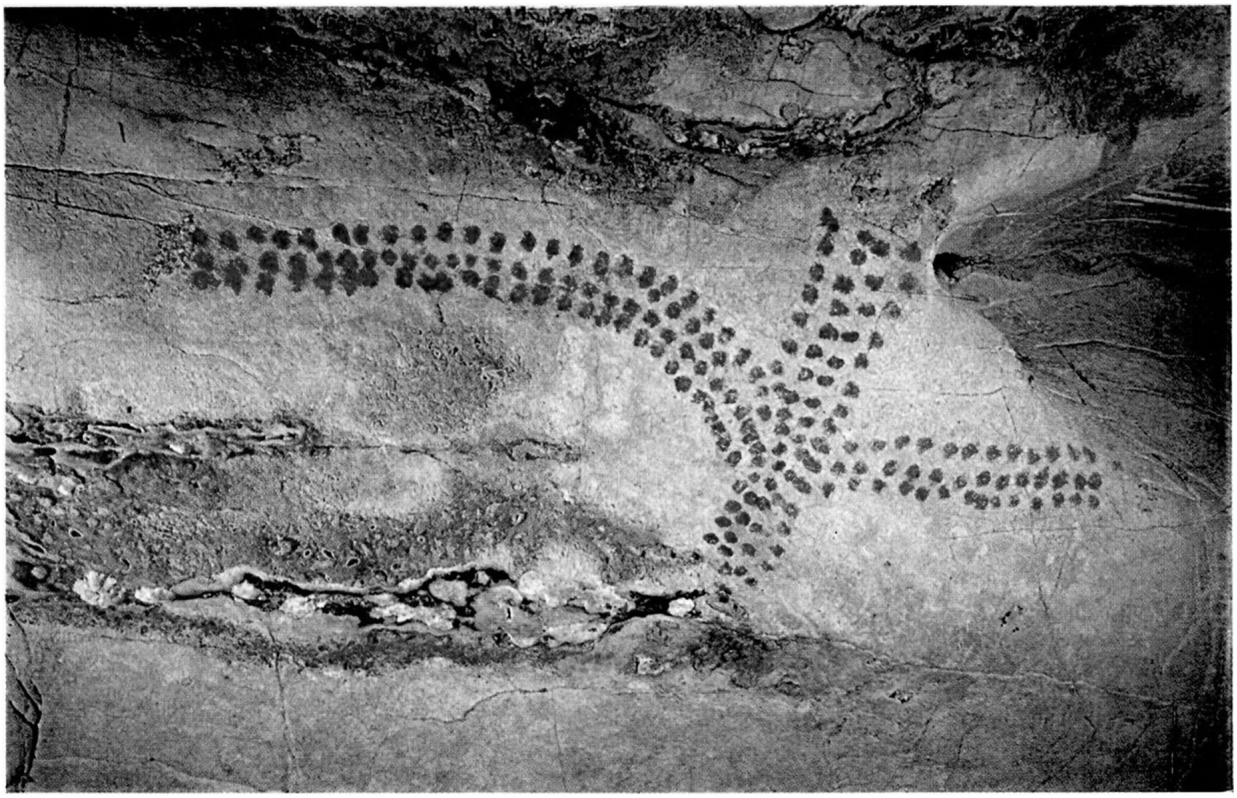


XIII. ALTAMIRA: *Several painted recumbent bison, formed from outcroppings of the rock ceiling* (*cf. p. 427*)

XIV. ALTAMIRA: *The recumbent bison to the right*

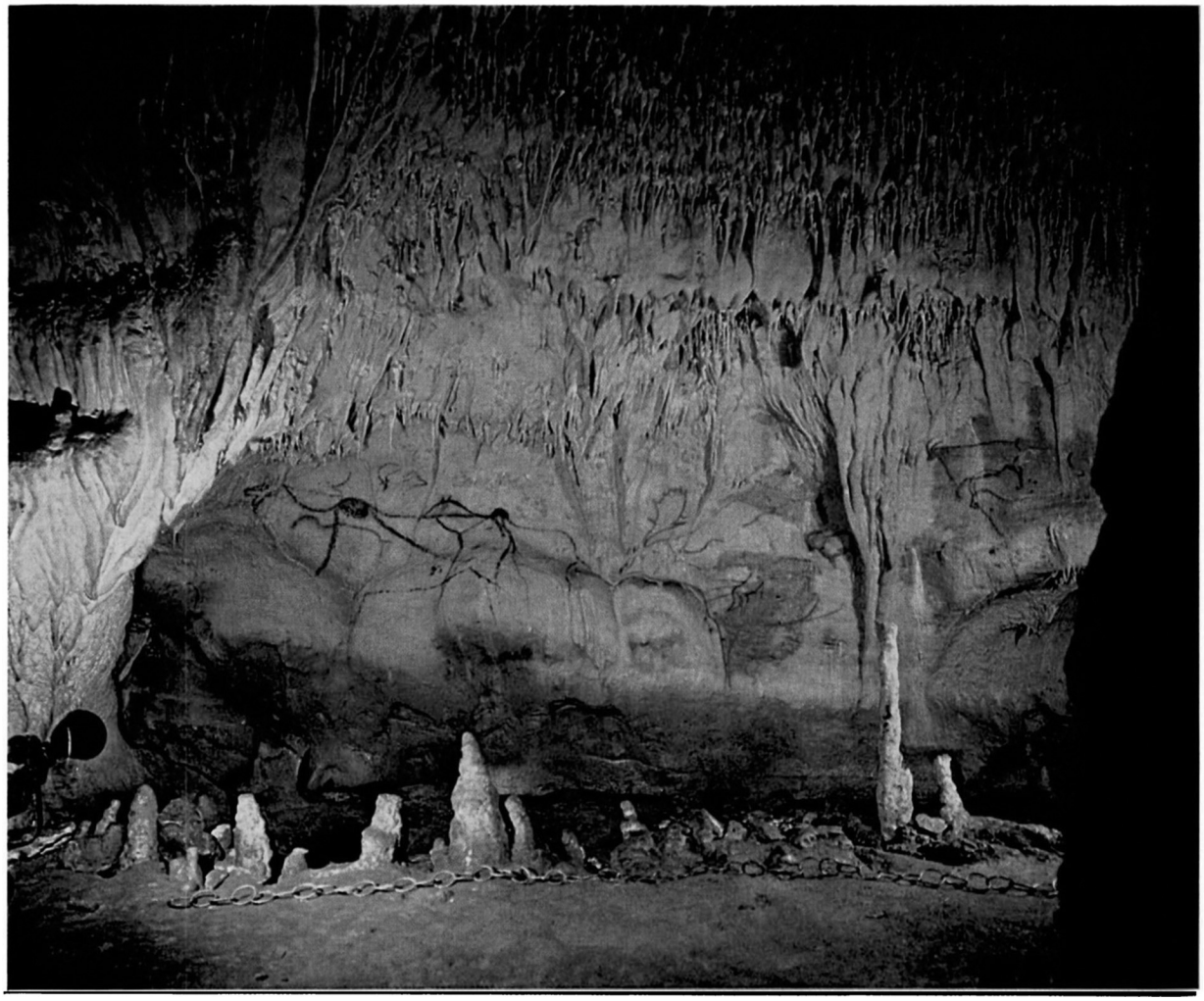
XV. ALTAMIRA: *Large hind*, *pale bison*, *and red symbol on the ceiling* (*cf. pp. 421, 424*)

XVI. ALTAMIRA: *The red symbol* (*cf. p. 421*)

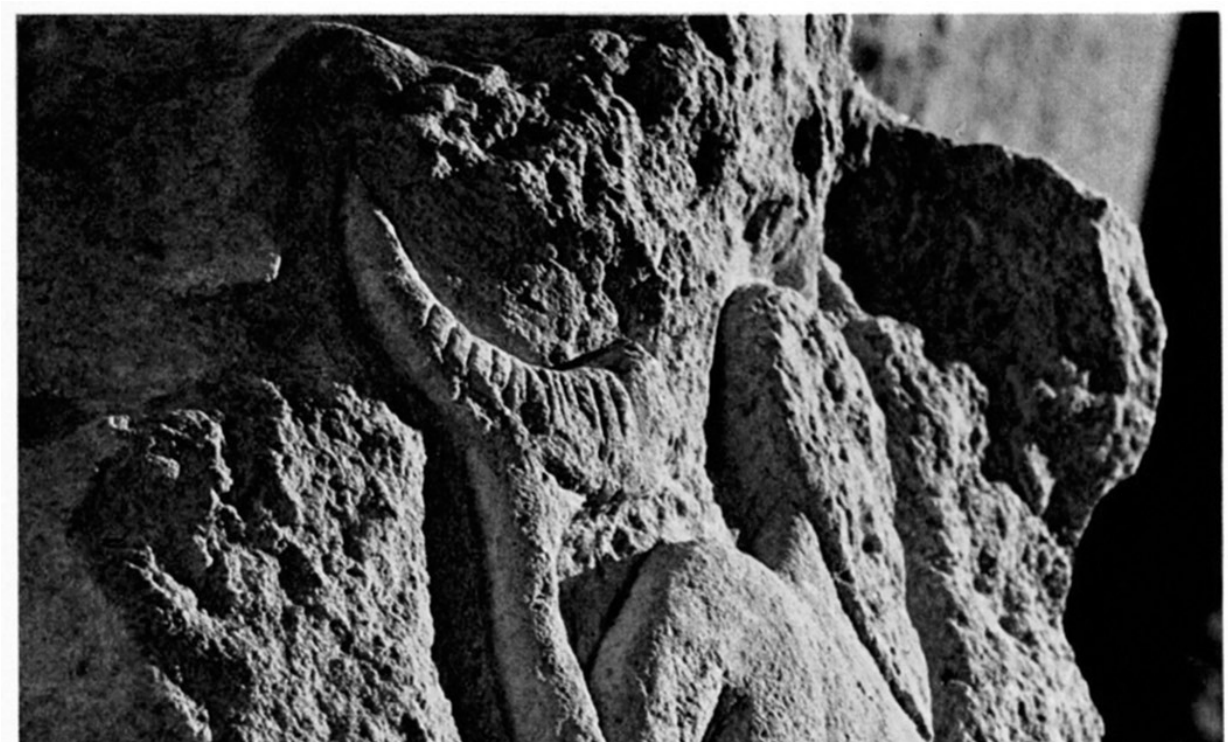


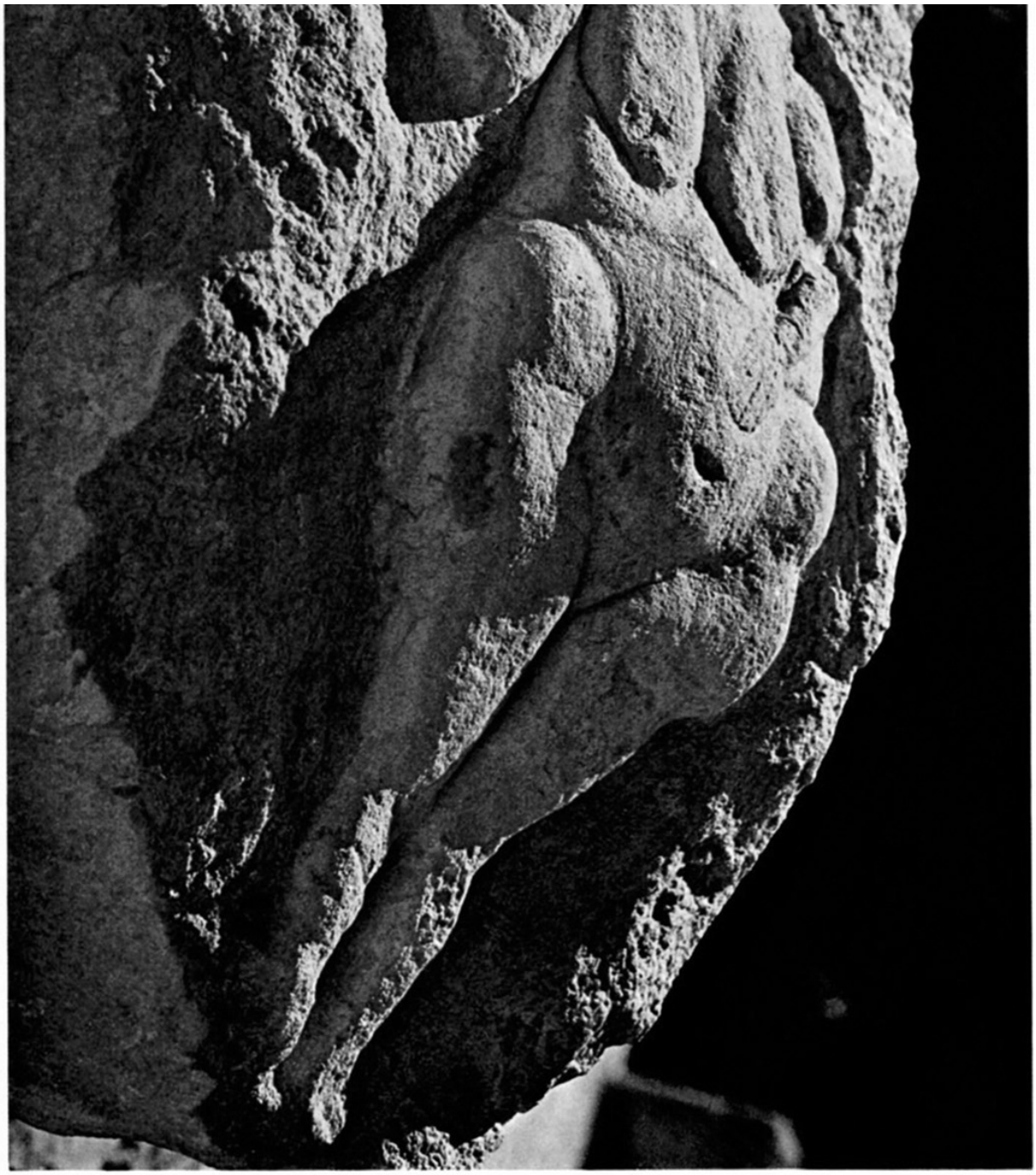
XVII. EL CASTILLO: *Rows of red dots developed into a symbolic form* (*cf. p. 146*)

XVIII. MARSOULAS (*Haute-Garonne*): *Bison formed of red dots, with symbol below* (*cf. p. 147*)



XIX. COUGNAC (*Lot*): *Several animals; right center, red Cervus elaphus with headless human figure* (*cf. p. 456*)





XX . LAUSSEL (*Dordogne*): *The Venus of Laussel* (*cf. p. 469*)

PART IV
THE SACRED ANIMAL

Man's transition from a zoomorphic attitude towards the world to an anthropomorphic attitude constituted the most profound revolution experienced in his destiny. This was the beginning of the separation of man from animal, of creature from creature: the beginning of man's gradual separation from the world in which he was embedded and whose rhythms permeated his being.

Internal and external revolutions followed this initial severance: the sociological stratification of a hierarchical social order, the establishment of cities, kingdoms, and empires. But none of these upheavals penetrated so deeply into the very marrow of man's relation to the world and into his environment as the gulf which opened up at the end of the zoomorphic age between creature and creature. This process of separation, probably brought about by the force of circumstances, opened the way to man's alienation from those natural laws which govern every living being. Man was uprooted from the natural world order.

A. R. Radcliffe-Brown has contrasted the situation of primitive man and modern man in relation to his "social order and natural order" from the point of view of the anthropologist. He states:

"In modern thought we are accustomed to draw a distinction between the social order and the natural order. We regard society as consisting of certain human beings grouped in a social structure under certain moral principles or laws, and we place over against the society its environment, consisting of geographical features, flora and fauna, climate with its seasonal changes, and so on, governed by natural law.

"For certain purposes this contrast of society and environment, of man and nature, is a useful one, but we must not let it mislead us. From another and very important point of view the natural order enters into and becomes part of the social order. The seasonal changes that control the rhythm of social life, the animals and plants that are used for food or other purposes, these enter into and become an essential part of the social life, the social order. I believe that it can be shown that it is just in so far as they thus enter into the social order that natural phenomena and natural objects become, either in themselves, or through things or beings that represent them, objects of the ritual attitude. . . . Our own explicit conception of a natural order and of natural law does not exist amongst the more primitive peoples, though the germs out of which it develops do exist in the empirical control of causal processes in technical activities. For primitive man the universe as a whole is a moral or social order governed not by what we call natural law but rather by what we must call moral or ritual law." (1952, pp. 129, 130.)

The age of the supremacy of the animal — of the natural order — reaches back immeasurably. From its first tangible vestiges in the Mousterian period, the zoomorphic age continues throughout the entire span of prehistory.

These are time spans for which we have no scale of comparison. Though, with some difficulty, it is possible for us to imagine happenings which have occurred during the anthropomorphic age, yet this covers barely five millenniums of history. The immense depths of time, the eons, of the zoomorphic age, when the animal world was supreme — forty thousand years or more — are as far beyond our powers to grasp as the distances of the stars. But the duration of the zoomorphic age does give us some inkling of the tremendous strength of the ties which must have bound man to animal and which we have lost the capacity to comprehend.

Man then severed himself from this placenta in which he and the world had been embedded. The first step in this severance was the dethronement of the animal. Today man is striving to become master of matter. The process of segregating man from the natural world around him grows ever more and more dangerous.

Animal cult and high civilizations

Undoubtedly animal worship formed the background also of the first high civilizations. Even though an anthropomorphic pantheon held the ruling power, it was inextricably mingled with animal-gods.

A renaissance, a last flare-up of animal worship, was demonstrated in Egypt as late as the seventh century B.C. The countless mummified animals of the Saite period act as silent witnesses to this.

Another approach to the world was evidenced in the Greek myths. The animal is here dethroned: dethroned forever. There is no lack of hybrid men-animals in the wide domain of the Greek demigods (centaurs, satyrs, etc.). Zeus himself did not disdain to take on the form of a bull or a swan. But this is not in a sacred or ritual sense as in Egypt, where the god is often presented in the form of a member of the animal world — e.g., Horus as a falcon — and god and animal, animal and god become identical. When the Greek gods took on animal form it was as a dissembler: a disguise, a mask, to further an amorous adventure. Animals became evil demons, man-hating monsters. Ordinary men were powerless against the magic might of these fabulous creatures. They could only be destroyed by demigods. A new figure arose: the hero.

Hercules, demigod, son of Zeus and Alcmene, alone had power to vanquish the monsters which threatened the land and its people. He accomplished the tasks laid upon him in the so-called Twelve Labors of Hercules. The animals he had to overcome were all equipped with magic powers: the Nemean lion, the Lernaean hydra with a doglike body and many snaky heads, the Ceryneian hind with brazen hoofs and golden horns like a stag, the Erymanthian boar, the countless brazen-beaked, brazen-clawed, brazen-winged, man-eating Stymphalian birds, the Cretan bull which belched scorching flames, the savage, man-eating mares of Diomedes, and Cerberus, the dog of the underworld, with three heads, each maned with serpents (Graves, 1955, II, pp. 103–155).

The animals which appear on the walls of the caverns — bulls, lions, snakes, boars, birds —are transformed in the Greek myths to fabulous man-hating monsters. A tragic situation arises: a demigod, himself in slavery, has to accomplish their destruction. There is no memory of that bond which once held man and animal in one embrace. The emergence of the hero symbolized the end of the zoomorphic epoch.

Some remnants of zoomorphic veneration have been offered refuge among primitive peoples. Yet, just as snow retreats to rocky clefts when another season spreads along the valleys, so the rudiments of a ritual connection with the animal world are doomed to extinction by the aggressive, materialistic influence of Western civilization.

THE ANIMAL AND THE RELIGIOUS IMPULSE

The pictures of animals on the walls of the caverns give us more clues to the religious motivations of prehistory than anything else that has come down to us. But they must not be looked at independently. The symbols near them hint at meanings related to the prehistoric approach to the cosmos, though, unfortunately, except in a few individual cases, their meaning is lost to us. There are also scenes such as the ritual burial of animals, and composite beings or men disguised as animals come into this category.

All these are signs of a religious impulse. The question then arises: do they point to a definite religious attitude or are they, in greater or less degree, only accidental phenomena?

RELIGION AND RITES

The quality of primeval art was first judged according to its naturalistic appearance or even according to its correctness of perspective. The danger is similar if we use our concepts of religion as the standard by which to judge the religious impulse of primitive peoples and of prehistoric man. This is equally far from the point. Social anthropologists, theologians, and philosophers soon realized that our concepts of religion cannot be simply projected into the mentality of primitive man. A. R. Radcliffe-Brown forcefully emphasized in a lecture on religion and society (1945): "The usual way of looking at religions is to regard all of them, or all except one, as bodies of erroneous beliefs and illusory practices" (p. 153).

A major difference lies in the fact that primitive religions possess no dogma. Their foundation rests on the continued observance of ritual customs. Religious rites are defined by Radcliffe-Brown as "observances, positive and negative, i.e., actions and abstentions" (p. 155). Such rites have longer lives than dogmas. He exemplifies this as follows: "The relative stability of rites and the variability of doctrines can be illustrated from the Christian religions. The two essential rites of all Christian religions are baptism and the eucharist, and we know that the latter solemn sacrament is interpreted differently in the Orthodox Church, the Roman Church, and the Anglican Church. The modern emphasis on the exact formulation of beliefs connected with the rites rather than on the rites themselves is demonstrated in the way in which Christians have fought with and killed one another over differences of doctrine" (p. 157).

"My suggestion," says Radcliffe-Brown, "is that in attempting to understand a religion *it is on the rites rather than on the beliefs* [my italics] that we should first

concentrate our attention" (p. 155). Endless discussion could have been avoided if this realization had been made widely enough known and primitive religions not been assessed from our own cultural standpoint.

Robertson Smith, "that great pioneer of the science of religion," as Radcliffe-Brown calls him, wrote as follows: "In connection with every religion, whether ancient or modern, we find on the one hand certain beliefs, and on the other certain institutions, ritual practices and rules of conduct. Our modern habit is to look at religion from the side of belief rather than that of practice; . . . the study of religion has meant mainly the study of Christian beliefs, and instruction in religion has habitually begun with the creed, religious duties being presented to the learner as flowing from the dogmatic truths he is taught to accept. . . . But the antique religions had for the most part no creed; they consisted entirely of institutions and practices. . . . We find that while the practice was rigorously fixed, the meaning attached to it was extremely vague, and the same rite was explained by different people in different ways, without any question of orthodoxy or heterodoxy arising in consequence. . . .

"It is of the first importance to realise clearly from the outset that ritual and and practical usage were, strictly speaking, the sum-total of ancient religions. Religion in primitive times was not a system of belief with practical applications; it was a body of fixed traditional practices to which every member of society conformed as a matter of course. . . ." (Radcliffe-Brown, pp. 155–56.)

W. Robertson Smith (1846–94), who was a notably versatile Cambridge scholar — Orientalist, naturalist, and Old Testament critic — put forward this view in his *Lectures on the Religion of the Semites*, which first appeared in 1889.

Radcliffe-Brown reminds us that as a result of his study of the people of the Andaman Islands, an isolated group southeast of India, he had put forward a theory as early as 1908 on the social function of rites and ceremonies. He found the importance of rites stressed in early Chinese sayings which go back more than twenty centuries. Their point of departure was not religion in the sense of an established doctrine but rites and their function. Radcliffe-Brown deals at length with the *Li Chi*, or Book of Rites, a compilation of the third century B.C. It is concerned mainly with ceremonial and etiquette and demonstrates the deep influence of ritual customs and their sociological import on Chinese culture. He gives a number of instances which show the strong faith in the powers of ritual even in a high civilization, which however had its roots deeply anchored in prehistory. For example, the word *li*, says Radcliffe-Brown, "consists of two parts, of which one refers to spirits, sacrifice and prayer, and the other originally meant a vessel used in performing sacrifices. We may therefore appropriately translate *li* as 'ritual'" (p. 157).

Such perceptions give us a key to understanding the religious impulse of primitive man and of prehistoric man. The art of prehistoric times projects and embodies prehistoric rites. "Rites can be seen to be the regulated symbolic expressions of certain sentiments. Rites can therefore be shown to have a specific social function when, and to

the extent that, they have for their effect to regulate, maintain and transmit from one generation to another sentiments on which the constitution of the society depends. I ventured to suggest as a general formula that religion is everywhere an expression in one form or another of a sense of dependence on a power outside ourselves, a power which we may speak of as a spiritual or moral power" (p. 157).

Direct and indirect relations between religion and the social structure have been studied from the standpoint of the anthropologist, and rites have been defined as "symbolic expressions of certain sentiments." Religion thus becomes the expression of dependence upon invisible powers.

MYSTICAL EXPERIENCE

Similarly, the approach to the mystical cannot be assumed to partake of what is today understood by an *expérience mystique.*

In the preface to his sixth and last volume, *L'Expérience mystique et les symboles chez les primitifs,* L. Lévy-Bruhl states that one must be careful not to equate the *expérience mystique* of primitive peoples with "our current notion." He says: "Our notion . . . has been elaborated in the course of centuries by generations of philosophers, psychologists, logicians, and other scholars. In their hands it has become primarily a function of the intelligence" (1938, p. 9). He contrasts this with the primitive's conception of the mystical experience: "I understand this to be the feeling they have of direct contact with invisible realities whose presence activates the effective category of the supernatural" (p. 7).

The mystical experience becomes a direct experience: another instance of the repeatedly emphasized indivisible unity of the world. The transference of the mystical experience to the transcendental, other-worldly sphere had not yet occurred. This took place after the creation of the anthropomorphic pantheon of the gods: the localization of the invisible within the invisible — within heaven. Lévy-Bruhl expresses it: "In our civilizations it [another world] denotes a kind of transcendental reality, inaccessible to the humble faculties we possess in this world. Among the primitives, however, the mythical world is not situated somewhere else, outside the country they are inhabiting, not even beyond the rim of the horizon" (p. 16). He then quotes a beautiful passage from M. Leenhardt's *Gens de la grande terre:* "One lives in the visible world and rejoices in its charm, and simultaneously one is conscious of the invisible world, just as one is conscious of the atmospheric pressure, about which one thinks nothing when it does not disturb one's bodily function, but which becomes oppressive or exalting when the normal equilibrium is disrupted. The invisible world is charged with life" (p. 15).

THE AMBIVALENCE OF THE SACRED

Even the concept of sanctity as we understand it is different from that held by primitive man. For us the sacred is sharply divided from the profane. It denotes something to be worshiped and is predominantly associated with the other world.

The concept of the sacred among primitive men is, says Radcliffe-Brown, connected with the concept of taboo (p. 133), a word derived from the Polynesian *tabu*, meaning simply "to forbid," "forbidden." This includes the prohibition of touching in any way. Exogamy is only a special instance of taboo. The sacredness of a chief and "the uncleanness" of persons put to death for sinning against a taboo are denoted by the same word: *tabu.* A parallel instance can be found in the high civilization of Rome: "the Latin *sacer* did apply to holy things such as the gods and also to accursed things such as persons guilty of certain crimes" (p. 139).

This double meaning of the sacred, which includes both the holy and the unclean, Eliade has called the "ambivalence du sacré" (1949; tr. 1958, p. 26). This ambivalence is merely another form of the interlocking of visible and invisible. A single cord unites the heights and the depths. Animals are simultaneously objects of adoration, life-giving food, and hunted quarry. Many rites for the pacification and propitiation of the slain animal are known from the latest stages of the age of the hunter, some of which can be traced back into prehistory through pictorial representations and certain rites, as in the bear cult. This double significance of the animal as an object of worship and a source of nourishment is an outcome of the same mentality as the concept of sanctity.

In order to come closer to the meaning of representations of animals we have stressed three concepts: rites, the mystical experience, and the sacred. Others could have been cited. But these three concepts, which have all been defined by scholars of standing, bring out particularly well the variations of meaning we must ever bear in mind.

Rites, not dogma nor systems of belief, are decisive throughout prehistory and into the period of the high civilizations.

The mystical experience, with which the whole primitive world is flooded, cannot be interpreted in its present, other-worldly sense. For primitive peoples it signified *contact immédiat* with *réalités invisibles.* Without this the symbols and the other representations of primeval art are not conceivable. The mystical experience permeates the whole atmosphere of the caverns.

The sacred was ambivalent. It embraced simultaneously the sacred and the profane. The double significance of the animal —on the one hand all-powerful and worthy of the deepest veneration, on the other hand something to be eaten —is derived from the same way of thinking as the concept of the sacred. Thus rites, mystical experience, and the sacred all profoundly affect primitive man's approach to the world. Paul Klee has said: "All existing things, corporeal and incorporeal, sublime and abominable, belong to one indivisible world."

So much for the fruits of scientific knowledge in various fields of research, but it should be added that we are here dealing with a problem of constancy which reappears today in the work of the masters of emotional expression: poets and painters. Both

James Joyce and Paul Klee use them as a starting point for their art. On July 10, 1917, Klee noted in his diary: “New ways are opening: the diabolical must become fused with simultaneity. Duality must not be treated as such but as a complementary unity” (1957, pp. 377–78). Even earlier, in the summer of 1916, he wrote in an essay entitled “A Standpoint of My Own” : “I am taking a remote starting point for creative work, where I can divine a kind of formula for human being, animal, plant, stone, and for the elements and all revolving powers at one and the same time” (ibid., p. 349).

THE ANIMAL AND TOTEMISM

Since totemism first began to be a subject of scientific study it has become so many-sided and complicated that any firm statement can be easily countered by contrary evidence. This is the result both of the mounting mass of material accumulated over the past few decades and of changes in the stress laid upon different values. The intense interest in the nature of totemism, which was so strong around the turn of the century, is now almost extinct. Totemism as an institution has become incorporated into the sociological research prominent today. It is considered interesting today only in so far as it exercises an influence upon the organization of social life: such as patrilineal and matrilineal descent and their manifold intermediate gradations, "common characteristics of lineages, sibs and moieties." So G. P. Murdock, who continues: "Its bearing on the formal structuring of social relations is comparatively slight" (1952, p. 49). The ever more intensive concentration upon "behavioristic psychology," whose importance is well known in connection with aborigines, is one explanation of the declining interest in totemism as a phenomenon.

However this may be, totemism, in our context, is a crowning example of the interlocking of the fates of man and animal. It is only in this most general sense that reference will here be made to it. We must not overlook the fact that the term was not restricted to the animal kingdom. It embraced everything that exists, both in animate and — to us — inanimate nature: plants, trees, pools and waterplaces, stones as well as stars. All possessed a life and a soul, all could be a totem. Totemism meant an all-inclusive interconnectedness, though animal worship held by far the largest place in it.

It is therefore understandable that E. B. Tylor includes the phenomenon of totemism within the phenomenon of universal life — animism — which is the foundation stone of his *Primitive Culture* (first published 1871). For him animism is "the doctrine of human and *other* Souls" (1958 edn., II, p. 12; my italics). After carefully preparing the uninitiated reader, he points out the limits of belief: "the doctrine of object souls" (p. 60), which is found among certain tribes in many parts of the world. To illustrate this he instances, among others, an impressive report from a missionary to the Fiji Islands: "Those who profess to have seen the souls of canoes, houses, plants, pots, or any artificial bodies, swimming with other relics of this frail world on the stream of the Kauvandra well, which bears them into the regions of immortality, believe this doctrine as a matter of course" (p. 64).

TOTEMISM AND CHANGES IN ITS CONCEPT

We are here interested only in the question of the ties between man and animal, which are nowhere more intensively evident than in the totem. The strength of this inner kinship is demonstrated by the idea of blending man with animal even to the extent of their being of the same blood. Let us consider briefly the changing concepts of the countless variations of this oscillating phenomenon.

The first stage is one of curiosity. The word "totemism," as is well known, was first used in the eighteenth century by John Long, a traveler and fur trader, in his *Voyages and Travels of an Indian Interpreter* (1791). He had come across the word *totam* among the Ojibway Indians, and he stated: "One part of the religious superstition of the Savages consists in each of them having his *totam* or favourite spirit, which he believes watches over him. The totam they conceive assumes the shape of some beast or other, and therefore they never kill, hunt or eat the animal whose form they think this totam bears" (p. 86).

The second and decisive stage, in which totemism was subjected to scientific analysis, began in the latter part of the nineteenth century. Totemism was now pressed into the service of evolutionism. It provided an excellent argument for a demonstration of the development of man from a state of barbarism to one of high civilization.

This stage received its momentum from an essay, "The Worship of Animals and Plants," in *The Fortnightly Review*, 1869, by the Scottish lawyer J. F. McLennan. McLennan contests John Long's view that totems were simply the protective spirits and emblems of individuals.

The view that totems were individual emblems was supplanted by the concept of group totemism — the totemic tribe and the totemic clan. Present concepts believe this to be too undifferentiated, but at that time it could be roughly defined as follows: "There are tribes of men (called primitive) now existing on the earth in the Totem stage, each named after some animal or plant, which is its symbol or ensign, and which by the tribesmen is religiously regarded; having kinship through mother only, and exogamy as their marriage laws" (p. 427).

Then followed a period of assembling material. The greatest figure in this field was J. G. Frazer (1854–1941). His little book *Totemism*, of 1887, was followed in 1910 by the weighty *Totemism and Exogamy*, "an assiduous compilation of data" (Lowie, 1937, p. 102). Today Frazer is regarded as an outstanding collector of material rather than as a man who developed new theories: "a scholar, not a thinker" (Lowie, p. 102).

The third stage saw totemism increasingly absorbed within the rapidly developing field of social anthropology. This process had been prepared for and even, to some extent, effectuated during the previous stage. But now the sociological aspect came into the foreground, with the French school providing its theoretic basis. Emile Durkheim (1858–1917), following on from the positivism of Auguste Comte, considered all domains of human thinking and feeling as sociological phenomena. Even before 1900 he had founded *L'Année sociologique,* which was devoted to the study of primitive cultures as a means of better understanding sociological development. In *The*

Elementary Forms of Religious Life (1912, tr. 1915) he interpreted religion as a purely social phenomenon. He took as his basis the religion of the Australian aborigines, among whom he perceived the clan to be the simplest social organization, instead of the family. In this context Durkheim recognized totemism as a most important ingredient of primitive religion. The individual and the psychic factor retire from view. The social aspect governs all. This point of view explains Durkheim's obstinate refusal to admit the psychological approach with its emphasis on individual interpretation.

TOTEMISM AND THE PSYCHIC FACTOR

The sociological approach, which considered all aspects of human life in their social relations, was now confronted by a diametrically opposite point of view: the human psyche and the individual. Freud's *Totem and Taboo* (1913), subtitled "Some Points of Agreement between the Mental Lives of Savages and Neurotics," appeared in English translation in 1918. Freud strove to unearth the original meaning of totemism from its vestiges in early childhood. As he states in his preface: "An attempt is made . . . to deduce the original meaning of totemism from the vestiges remaining of it in childhood —from the hints of it which emerge in the course of the growth of our own children" (1955 edn., p. xiv).

In his longest chapter, "The Return of Totemism in Childhood," Freud deals with relations between man and animal: "There is a great deal of resemblance between the relations of children and of primitive men toward animals. Children show no trace of the arrogance which urges adult civilized men to draw a hard-and-fast line between their own nature and that of all other animals. Children have no scruples over allowing animals to rank as their full equals. Uninhibited as they are in the avowal of their bodily needs, they no doubt feel themselves more akin to animals than to their elders, who may well be a puzzle to them" (pp. 126–27).

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To track back certain impressions and reactions to infancy is close to Freud's original method of work. The analysis of other uninhibited expressions of early childhood, such as children's drawings, was used by G. H. Luquet to explain certain phenomena in primeval art (1930).

The persistence of primeval complexes is one of the phenomena of constancy. Psychologists, in particular J. Piaget, have shown that the close primeval relationship between man and plants, stones, and other inanimate objects still continues to live on unabated in the imagination of children (1926, p. 205).

No other book on the subject of totemism aroused such lasting and widespread interest as *Totem and Taboo.* It is true that today some scholars dismiss it with the comment, "knowledge insufficient." But others think otherwise, including such realistic-minded specialists as G. P. Murdock, who carried out a cross-cultural study of one

hundred and fifty human societies at the Institute of Human Relations at Yale University. He wrote: “Recognition is fully and gladly accorded herewith to the genius of Freud, to the keenness of his insight into a previously obscure realm of phenomena and to the extreme importance and soundness of his discoveries” (1949, p. xvii). At the same time he points out the limits of psychoanalytical techniques. “Psychoanalysis fulfills few of the requisites of a rigorous, testable and progressive body of scientific knowledge. . . . It is probably destined to disappear as a separate theoretical discipline, as its findings are gradually incorporated into some more rigorous scientific system, such as that of ‘behaviouristic psychology’” (p. xvii).

This brings us to the present stage of the concept of totemism: its absorption within the complex of social behavior, a field which, in the United States in particular, is constantly growing in importance.

TOTEMISM AND PREHISTORY

The many shades of meaning that totemism can assume are not directly important in our context: whether it represented direct descent from an animal, a close relationship between one’s primeval ancestor and a revered animal, interchange of forms (the animal becoming a man or a man taking on the form of an animal); or whether the major emphasis lies with the tribal totem or the individual totem.

The question of the origins of totemism has now been abandoned by social anthropologists as “being forever incapable of inductive verification” (Radcliffe-Brown, 1952, p. 122). And even ethnologists like A. E. Jensen state that “the general situation in which totemism appears to us shows it to be a petrified end-product” (1956, p. 183).

Despite all this, the representations upon the cavern walls give certain indications that the origin of totemism was rooted in the relations of man-animal, animal-man. The closest connections appear in creatures which combine both man and animal within one being, similar to the bisexual idols, in which man and woman were fused.

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The bird-headed woman on the ceiling of the Hall of the Hieroglyphs at Pech-Merle is the earliest known representation of the fusion of a human being with an animal. The dancing attitude of this “goddess” has often been noted, and the question of what this means has often been asked. D. K. Zelenin considered dances and animal imitations of them to be something more than a pantomime of animal gestures, whether carried out by Prairie Indians, Bushmen, or Australian aborigines dressed, according to their region, in the skins of bison or kangaroo or in robes of ostrich feathers. This Russian archaeologist is not alone in believing that the origin of these dances was not a game,

but “that this imitation implies identity with the animal, a taking over of his being and behavior” (Friedrich, 1941, p. 35).

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This can be corroborated by prehistoric remains in the innermost sanctum of the cavern of Le Tuc d’Audoubert (Ariège). Near the final chamber, which contains the high relief of two bison, footprints of the Magdalenian age have been preserved beneath a layer of crystalline lime deposit. These have been convincingly interpreted by their discoverer, the Comte Bégouën, as the tracks of a Magdalenian initiation dance.

Totemism provides the clearest evidence of the relations between man and animal. But it is not the only evidence we have. In cases when it is not present a ritual relationship with the animal exists. Radcliffe-Brown points out that the Eskimo and the Andaman Islanders have no totems. Yet: “the relation between society and the natural species . . . the ritual attitude of the Andaman Islanders towards the turtle, of the peoples of North America and northern Asia to the bear, constitutes a relation between the whole Society and the sacred species” (1952, p. 126).

The individual totem betokens the sharing of a common fate by man and animal. This can go so far that if one dies, so must the other.

This common fate of man and animal is also expressed in hunting rites. Zelenin, whose extensive studies of early man as a hunter have been made available by Friedrich, puts it this way: “Between hunter and animal the closest relationship exists; if the hunter is not loved by the animal he cannot kill it” (1941, p. 34).

Hunting rites to secure the success of the chase display the same close interrelation between man and animal, sometimes expressed in song and prayer. The Navaho Indian “hunters were particular to observe all the rituals and taboos. If any were unfulfilled it was thought the game suffered. . . . The animals themselves were also thought to be aware of the hunter’s conduct” (Hill, 1938, p. 98).

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Because of the belief that man and animal shared a common fate, the animal’s well-being was strongly emphasized. It was thought that in the hunt the animal willingly offered its life to man. Everything should therefore be done to ease its death. As Knud Rasmussen remarked in a speech quoted by G. Gjessing: “When the Alaska Eskimos, as indeed other Eskimo tribes who occupy themselves with sculpture and ornamentation, furnish their implements with handsomely executed animal figures, it rests upon the idea that an animal prefers to let itself be killed with weapons on which care has been expended; in other words, behind their art too there is a magic purpose” (1944, p. 54). Above all, the animal must be given an opportunity of re-entry into life. This was the purpose of the earliest animal rites: the ritual interment of the skulls of the cave bear.

THE EARLIEST ANIMAL RITES

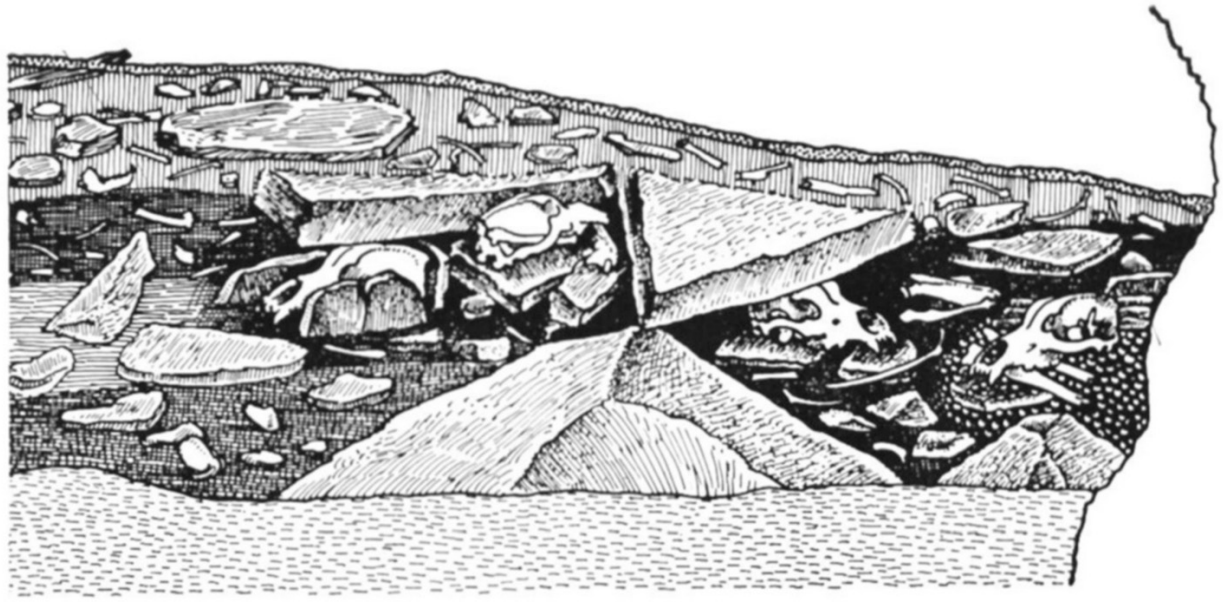
Totemism gave expression to the related destinies of animal and man — the *unio magica*, as it has been called. At its simplest this relationship expressed the knowledge that animal and man stood upon the same footing, but all signs go to show that the animal was considered to be on a higher level than the human being. It possessed a soul, just like man. It possessed a demonic strength. It could revenge itself. To man, after the perpetration of an act of outrage upon the animal, there came fear of its powers and a need to placate and restore friendly relations. After causing its death, the man had to give the animal the chance of renewing its existence.

Evidence of this relationship has been found as far back as the last interglacial era of the final ice age: in other words, tens of thousands of years before the appearance of art. This is the interment of the skulls of cave bears by hunters of the early Mousterian period.

Opinions differ as to the significance of these discoveries. These range from a blank refusal to acknowledge any human participation in the scene (Koby, 1943, p. 85) to a conjecture that the bear skulls preserved within stone "chests" or placed in wall niches represented offerings made to a higher being. The latter theory would thrust the existence of monotheism back into the early Mousterian period, and it is espoused by some theologians, especially of the Vienna school. Much heated discussion has arisen. The position has been set in its general historical context by K. Meuli (1946), and summaries have been prepared by, among others, J. Maringer (1956; tr. 1960, pp. 38–62) and H. Bächler (1957, pp. 131–46).

The bear cult at Drachenloch

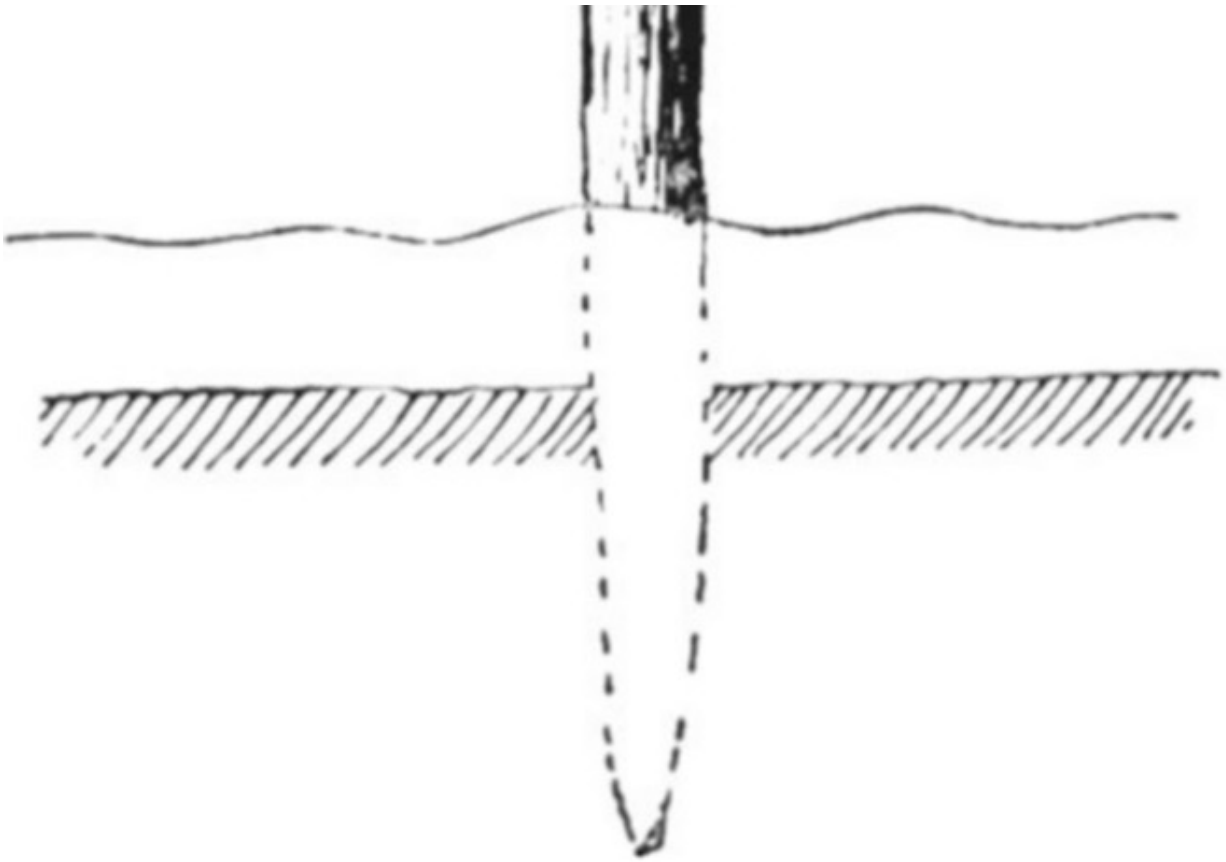
The Drachenloch, in the eastern Swiss Alps, is the highest cavern in which such finds have been made and, owing to its abundant material and early discovery (1917), it is one of the most discussed sites. It is 2445 meters high, 1400 meters above the valley through which flows the little Tamina River, a tributary of the Rhine. In this instance the situation itself is full of interest. A more ideally protected habitat for early Mousterian man can hardly be imagined. A gentle ascent, some six miles in length, comes to a sudden end at the rocky gorge of the Tamina. At the other end there is an abrupt fall of almost a thousand meters down to the valley of the Rhine. From the little village of Vättis, down in the Tamina valley, the Drachenloch can be reached by a stiff climb.



181. DRACHENLOCH (*St. Gallen*, *Switzerland*): *Mousterian bear skulls found interred in stone chests. Drawing by T. Nigg*

Excited by a lecture from E. Bächler, conservator of the museum at St. Gall, T. Nigg, a schoolteacher of Vättis, went on an expedition to the Drachenloch and, after the first few thrusts with his spade, came upon some teeth and bones that were later identified as those of cave bears. He sent them to Dr. Bächler, who then excavated there from 1917 to 1923 (Bächler, 1940). Some complaints were subsequently made regarding a lack of precision in the recording of their finds, and, as sketches by Nigg and Bächler were the only documentation available, I visited Nigg in 1956, a year before his death. He then told me that flashlight photographs had in fact been taken, but they had not developed satisfactorily.

182. DRACHENLOCH: *Bear skull with thigh bone pushed through cheek*



183. AHRENSBURG-STELLMOOR (*near Hamburg*): *Magdalenian wooden post with reindeer skull. From Rust, 1948*

Since that time, many remains of cave bears have been discovered in high caves: the Peterhöhle near Velden, in Bavaria; the Drachenhöhle near Mixnitz, in Styria, Austria; the Salzofen cavern, 2000 meters high in the Austrian Alps; in Yugoslavia, and in many other places. In 1946, A. Leroi-Gourhan found cave-bear skulls arranged concentrically in the Grotte des Furtins, between Mâcon and Cluny in Burgundy. All these finds point to a systematic interment and cannot easily be considered accidents of nature.

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The Drachenloch, above the Tamina valley, is a pipelike cavern divided into three parts. In the innermost part six cave-bear skulls were found, mostly in niches. They occasionally lay on a stone slab. Two slabs protected them on either side and another was laid on top, as is shown in T. Nigg's drawing. Similar arrangements were found in other places. The best-preserved skull from the Drachenloch belonged to a three-year-old bear. A complete thigh bone had been pushed through between the cheek-bone and the skull of the bear, in such a way that it could only be removed with difficulty and by using a twisting motion. In the Drachenloch the skulls and their accessories were in the most distant and secret part of the cavern — the most protected place possible — just like the most mysterious symbols of the Magdalenian era at Altamira and El Castillo.

Bear cult and circumpolar culture

The bear cult spread out toward the north and persisted longest in the circumpolar culture of Europe and Asia: from Lapps and Eskimo across to the Ainu of the northernmost island of Japan. L. Frobenius, in his *Kulturgeschichte Afrikas* (1933), outlines the regions of bear cults on a map extending from Finland through Asia to the Indians of North America, and instances parallel rituals in the African cults of the leopard and the lion (1933, p. 88). In the *Kalevala*, the Finnish national epic, of very ancient origin, the whole atmosphere of the bear cult is given its most poetic form. The songs and tales of the Finns, going back to prehistoric times, were collected and recorded in the early nineteenth century by two physicians, Zakarias Topelius and Elias Lönnrot, who wrote them down directly from the lips of the Finnish bards. In Rune XLVI, Väinamöinen, the magic singer, one of the chief figures of the *Kalevala*, kills the "golden friend of fen and forest," the bear Otso (line 117). He reassures the bear (lines 107–134): "Otso, thou my well-beloved, honey-eater of the woodlands, let not anger swell thy bosom; I have not the force to slay thee, willingly thy life thou givest as a sacrifice to Northland. Thou hast from the tree descended, glided from the aspen branches, slippery the trunks in autumn, in the fog-days, smooth the branches . . . Leave thy cold and cheerless dwelling . . . Come among the haunts of heroes, join thy friends in Kalevala. We shall never treat thee evil, thou shalt dwell in peace and plenty, thou shalt feed on milk and honey . . ." (tr. Crawford, given here as prose).

And when Väinamöinen brings the dead bear back to his village, it is received as a living guest and is seated in the best place of the house. Then Väinamöinen tells the bear again (line 490) that he neither cast a spear nor shot an arrow but that the bear fell down of his own accord from the tree and the branches pierced his belly. At the end, when all the feasting is over, Väinamöinen takes parts of the bear to a safe place on the top of a hill and places them within the crown of an old pine tree, facing toward the east.

One of the earliest chronicles of peoples of the north lands is Johannes Scheffer's *History of Lappland* (tr. 1704). Scheffer, an Alsatian, who became professor of law and rhetoric in the University of Uppsala, was appointed by the government of Sweden to prepare a report on the Lapps. All official records were put at his disposal, and in his monograph, which first appeared in Latin in 1673, entitled *Lapponia*, Scheffer quotes from the accounts of numerous travelers and authorities. Both for reference and for many of its illustrations, his work is still of great interest. Parts of his description of bear-hunting customs verify the content of the *Kalevala* songs. A Laplander who has discovered a bear's lair calls together his relations and friends, and they select "a Drummer, who by his Beating is to consult whether the Hunting is likely to be successful or not. . . . Being encouraged with the Hopes of good Success they march in very good Order, every one in his proper Station towards the Forest; he who first traced the Bear, being at the Head of them. . . . Next to him comes the Drumbeater, and after him the

Person who is to make the first attack upon the Beast; and so the rest, every one according to his Employment" (tr. 1704, p. 239).

After they have killed the bear they sing a song: "They thank the Bear for his coming thither, and that he did not hurt their Persons. . . . After they have thus proclaimed their Victory, they drag the Bear out, beating him with Rods and small Sticks. . . . Then they put him in a Sledge, drawn by Raindeer, and so carry him to the Hut, where the Flesh is to be boiled, Singing all the while another merry Tune or Song. . . . They pray the Bear that he may not raise Tempests, or do any other harm to those who had been concerned in the Slaughter. . . . Nobody is permitted to use that Raindeer for that Year, which has carried the Bear Home. . . . After the Men and Women have eaten all the Flesh, they gather up the Bones, but don't break them for the Marrow's Sake, as they do with those of some other Beasts, but bury them whole" (pp. 240, 241, 244).

Some signs of the survival of bear cults could still be observed in Lapland as late as the middle of the nineteenth century (Collinder, 1949, p. 161) . These few references go to show that bear hunts, and other hunts as well, were a collective enterprise, undertaken by the community as a group, and that they were deeply grounded in ritual.

Even the earliest animal rites bring out the deep-rooted relationship existing between animal and man, indicating that even at that time there had long been a belief that it was an offense to kill an animal. What appeared in its earliest form in the Mousterian period falls into the category of a cult of the skull which persisted throughout prehistory. The basic question is: are these objects related to an offering to a god or are they a form of restitution to propitiate the spirit of the slaughtered animal?

The songs of the *Kalevala*, as well as plentiful ethnological evidence, point to the latter interpretation. The skull is merely the most important part for renewing the life of the animal — the *pars pro toto.* Among the Iglulik Eskimo there was a taboo against breaking any of the bones of the caribou, so that they would not be lame in their future life. "In the old days," says a twentieth-century Eskimo, "rules were very strict . . . no bone of any animal might be broken, no brain or marrow eaten. To do so would be an insult to the souls of the caribou, and was punished by death or disaster" (Rasmussen, 1930, pp. 56–57).

The key to the role of the animal in prehistory lies in the belief that it possessed an eternal soul and a greater power and strength than the man who had killed it.

Knud Rasmussen, discoverer of the South Pole, held a wonderful discourse with Aua, a shaman of the Iglulik Eskimo, which he recounts in his report of the fifth Thule expedition. The oneness of these hunting people with the forces of nature and the hopelessness of their bondage are expressed. Fear and apprehension result; the worst of all, as Aua says, is: "We fear the souls of dead human beings and of the animals we have killed." And his brother adds: "The greatest peril of life lies in the fact that human food consists entirely of souls" (Rasmussen, p. 56).

The bear cult and other similar rites were a way of giving to the animal the means for regaining its life. The Aurignacian stone head of a demonic animal belonging to no known species, with a deeply incised vulva at the back, may be similar in meaning to the finds in the Salzofen cavern (Austrian Alps), which was found to contain two bear skulls, and beside each a complete paw, with claws, and what Ehrenberg calls the bone of a penis (1951, p. 106).

A well-known bone engraving from Chancelade (Dordogne) depicts a scene which apparently illustrates the rites connected with the burial of an animal. The head of a bison is of enormous size in proportion to an accompanying procession of seemingly masked men. This head is carefully drawn in every detail, in marked contrast to the body, which is reduced to the spine, the flesh apparently having already been consumed. The two forelegs were placed in front of the head, in a position not unlike that of the bones accompanying the Mousterian bear skulls. A procession of men, carrying curious branches, ceremoniously accompanies the carcass upon either side.

One can only surmise the purpose of these branches, but perhaps a curious custom noted by B. Collinder is not without significance: "Having killed the bear the hunters sang a song. . . . Then they lashed the dead beast with twigs. The purpose of this obviously was to confer vital force upon the bear, to give him a kind of substitute or compensation for the life which he had been deprived of" (Collinder, 1949, p. 159).

THE CULTS OF THE SKULL AND OF THE SACRED POST

Rites associated with the skull and with animal interments were means of accomplishing a rebirth of the animal. They need to be distinguished from rites involving sacred poles or posts, sometimes, but not always, surmounted by an animal's head. Such posts were made of wood or of stone and became, in some sense, centers of power. But they were not concerned with aiding a particular animal to re-enter life. They had a more generalized goal.

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From the bird on a pole in the cavern of Lascaux, which is being clutched at by a bird-headed man, the tradition of the bird-crowned staff or pole extends until the time of the Lombards in sixth-century Italy and until quite recently among some primitive peoples.

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An example from the northern Magdalenian period (around 8000 B.C.) was discovered by A. Rust in a pond (now meadowland) from the end of the last glaciation at Ahrensburg-Stellmoor, not far from Hamburg. He found there an undisturbed wooden post (2.12 m.) still topped with the skull of an aged female reindeer (1948, pp. 68–71).

Survivals of the cult of the sacred pole persisted until recent years among the Ainus in northern Japan, where the shaman continued to play an important role. Posts with animal skulls, called *inao,* sometimes clustered almost like a hedge, were found "near the hearth, on the seashore, beside rivers and springs, at crossroads — in short, in all places associated with divine beings" (Murdock, 1952, pp. 187–88). Murdock considered that "the *inao* are neither gods nor offerings."

In late neolithic times, the period of extreme abstractionism, a simple post of wood or pillar of stone was sufficient to betoken a sacred center of power. The menhirs, with their complex meanings, come into this category. Some are said to have been surmounted originally by the skulls of horses, which would point to their derivation.

The final development of the sacred post appears in Egypt, in the obelisk, whose peak was thought to be the resting place of the sun-god Ra.

The cult of the sacred post makes it even clearer that both the cult of the skull and ritualistic animal interments were closely related to the procreation of the species.

THE ANIMAL AND THE EVOLUTION OF PRIMEVAL ART

THE EARLIEST BEGINNINGS OF ART

Not even fully trained sensitive eyes can establish a continuous sequence of development for the first phase of primeval art: the long Aurignacian-Perigordian cycle.

There are two reasons for this. First we have to deal with an unimaginable length of time — with eons — far beyond the grasp of our experience of scale and reckoning. With some give and take, the Aurignacian-Perigordian epoch occupied some twenty millenniums.

The second and more essential reason lies in the limited range of works of art which have persisted from this enormously long period of time. The only acceptable indications of the chronology of these are provided by working tools found lying in the same stratum. But even these are not always sure guides, for differences of opinion arise between prehistorians which can lead to disquieting uncertainties about dates.

It is quite impossible to establish with any precision the gaps in time — not to speak of the conceivably missing works of art — which lie between those works available to us for comparison. Further, the two cultures Aurignacian and Perigordian interchanged several times, and sometimes existed side by side. It is possible to distinguish them by the different forms of their working tools as well as by the absence of bone implements in the Perigordian strata, but in the art of the caverns any clear-cut line of demarcation is highly hypothetical.

To establish any kind of accuracy in placing a work of art in its chronological position within this long period, some tangible clue must be discovered. At present we are obliged to rely on interpretations of the forms and technique of working tools, if any are found in the same strata. But, as G. Malvesin-Fabre once pointed out, these milestones of time are absent from most of the caverns: one would seek in vain for work tools in most medieval cathedrals. This is why determining the chronological order of most paleolithic art has been subject to such great variation.

The only really reliable indication of date comes when nature has been generous enough to fill the cavern or rock shelter with layers of debris sufficient to bury the rock engravings or reliefs. The tools found amid this debris must then be later than the engravings: as at Pair-non-Pair (Gironde), La Grèze (Dordogne), and La Colombière (Ain). A starting point is thus provided for establishing a date. Wherever this situation

does not exist uncertainty sets in, and consequently variations arise in attributing relative dates.

It may be concluded from this that it is better to abstain from too great a reliance upon the treatment of details and to attempt to approach the process of development by concentrating upon general and basic trends.

149, 268 col, 148

Further, it is somewhat dangerous to apply to the long millenniums of primeval art ideas derived solely from the headlong development of Western art in the few centuries following the Renaissance. Concepts such as "linear" and "painterly," which were usefully employed by my own teacher H. Wölfflin to trace the movement from the early Renaissance to the high Renaissance, do not bring out the essentials when one is dealing with the eons of primeval art. It is even less advisable to bring in references to more recent developments — such as Seurat's neoimpressionism — in connection with the dots on the Magdalenian bison in the cavern of Marsoulas (Haute-Garonne). No feeling of immediacy is intended here, nor is a sensuous appearance. The dots extend beyond the outline of the animal itself, and they are just as symbolic in their intent as the large red disks on the ponies in the cavern of Pech-Merle.

OUTLINES IMPRESSED IN CLAY

When the waters forced their way through clefts and hollows in the rock formation they left traces of their passage behind them. Most of the clay they carried still lies today in deep deposits on the floors of the caverns. But a thin layer of perpetually damp, ductile clay clung to the surface of many cavern walls and ceilings. This was the canvas upon which the first symbols and representations were traced by human hands.

It is often possible to find groups of parallel markings in the clay made by the cave bears in sharpening their claws. In the recently explored cavern of Rouffignac (Dordogne), an extraordinarily regular line of these markings extends along the gallery, like a frieze, at the height of an upright bear whetting its claws on the rock wall. On the ground, the bears' resting places formed tublike hollows in the clay (Nougier and Robert, 1957; tr. 1958, pp. 7–8). It has often been stated that it was the sight of these claw marks that first gave primeval man the impulse toward expression. This may be so, but it is completely irrelevant, for when man pressed his fingers into the cavern clay his intention was radically different. Here, for the first time, man attempted to give direct visible expression to his deepest desires by means of symbols and figurations. The yielding material proffered no technical impediment: only imagination was necessary.

296, 51

One of the most astonishing things about these first manifestations of the formative impulse is the grandeur sometimes achieved both in form and size: e.g., on the low ceiling in the cavern of Altamira, not far from the famous painted ceiling, and in Pech-Merle on the ceiling of the Hall of the Hieroglyphs. Here one can already observe an ever-recurring feature of paleolithic art: the simultaneous existence of drawings and engravings from different epochs, as a result of which all are interlocked and superimposed. These early scorings in the clay do not stand in isolation. They are linked and interwoven into a system, they cut across one another and extend over the entire ceiling, like ski tracks across the snow.

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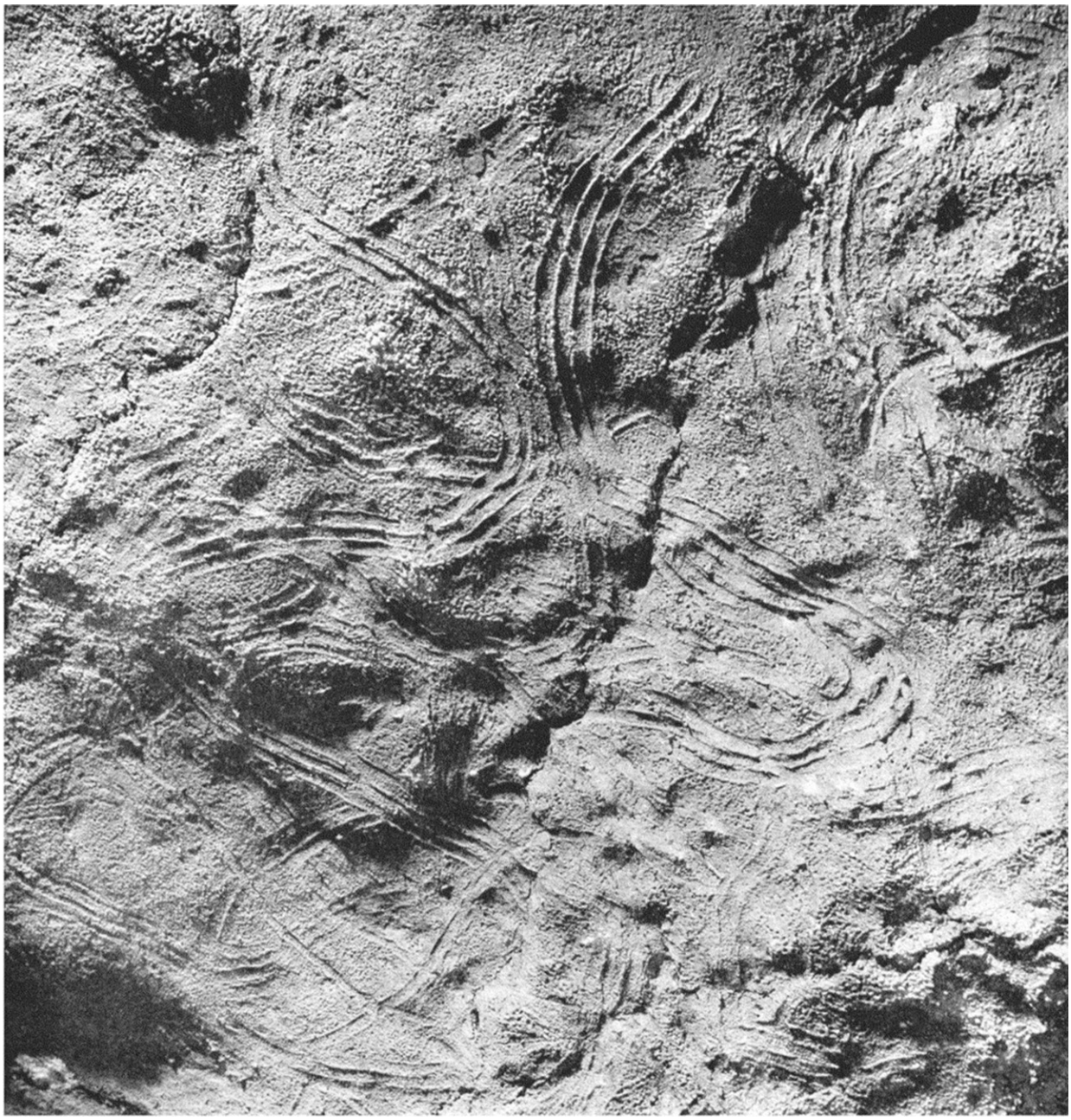
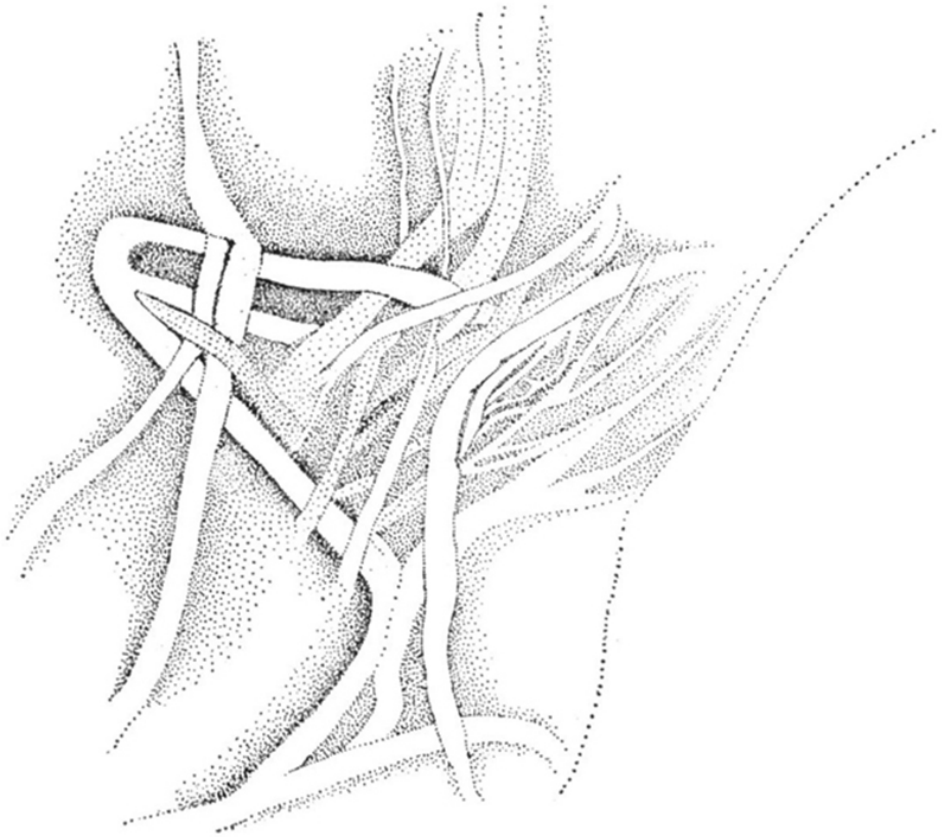
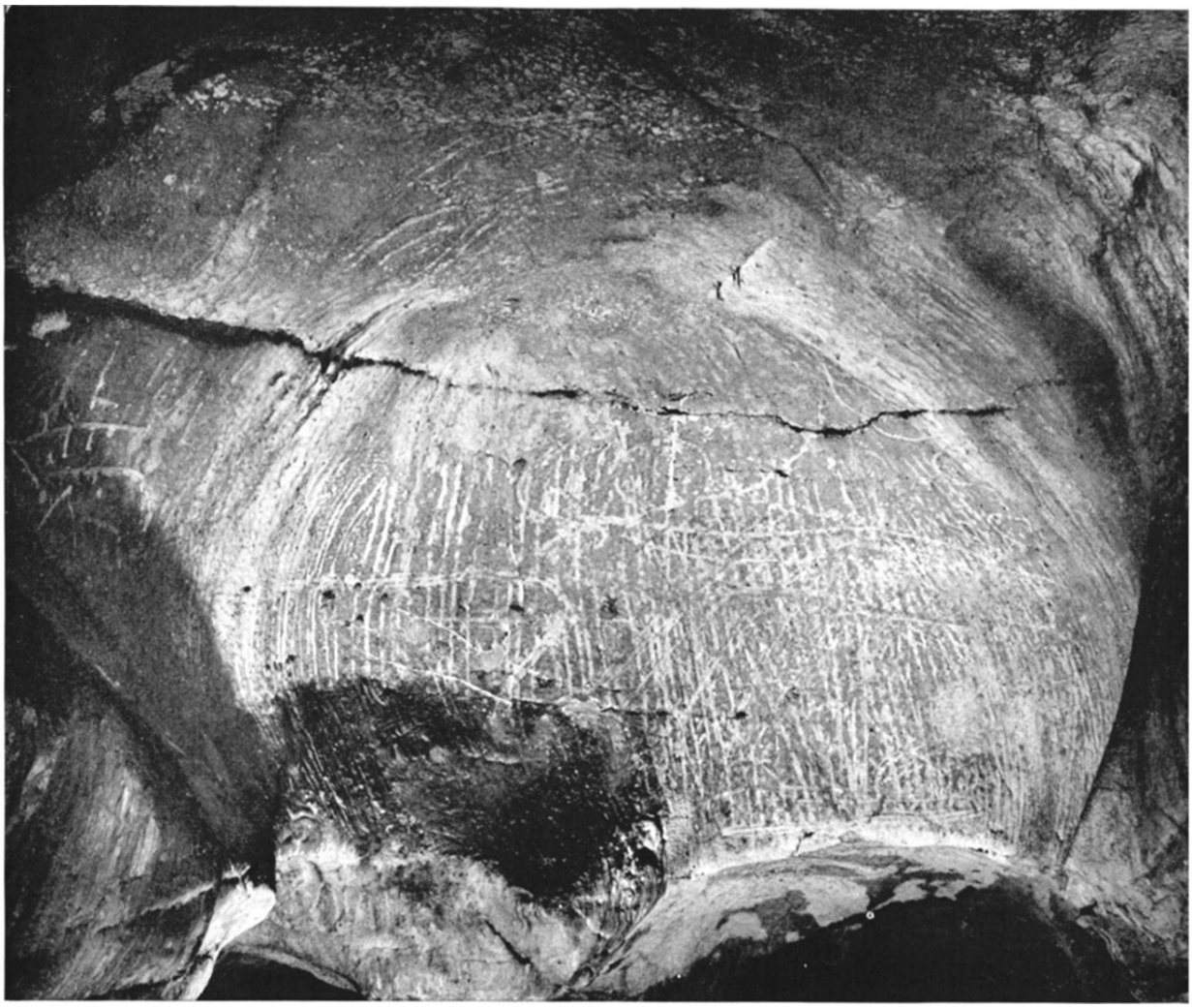
The symbolic meaning of these determinedly executed curving lines remains obscure. They must be closely related to the figurations that they encircle or traverse. It does not, however, always happen that these meandering lines were made earlier or later than an accompanying animal drawing. Sometimes the lines delineating an animal extend beyond it, and sometimes lines cross over the animal, as in the hind's head in the cavern of Hornos de la Peña. This is clearly brought out in the drawing accompanying the photograph.



184. ALTAMIRA (*Santander*): *Meandering lines traced in clay on low ceiling of right gallery with fallen frieze*



185. HORNOS DE LA PEÑA (*Santander*): *Head of hind. With drawing*



186. PECH-MERLE (*Lot*): *Clay drawing of giant stag, Cervus megaceros*

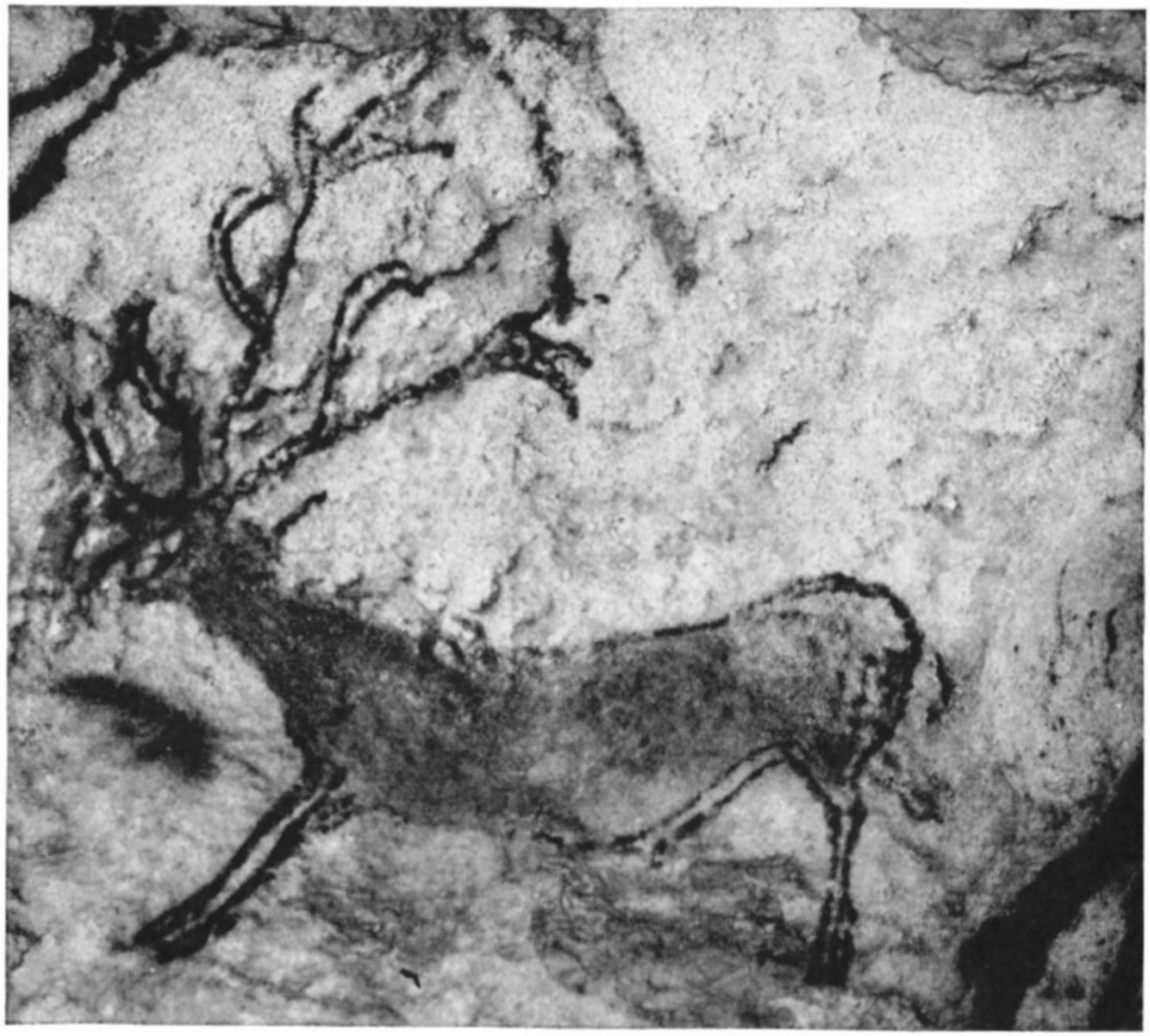
The giant stag of Pech-Merle

above, **below**

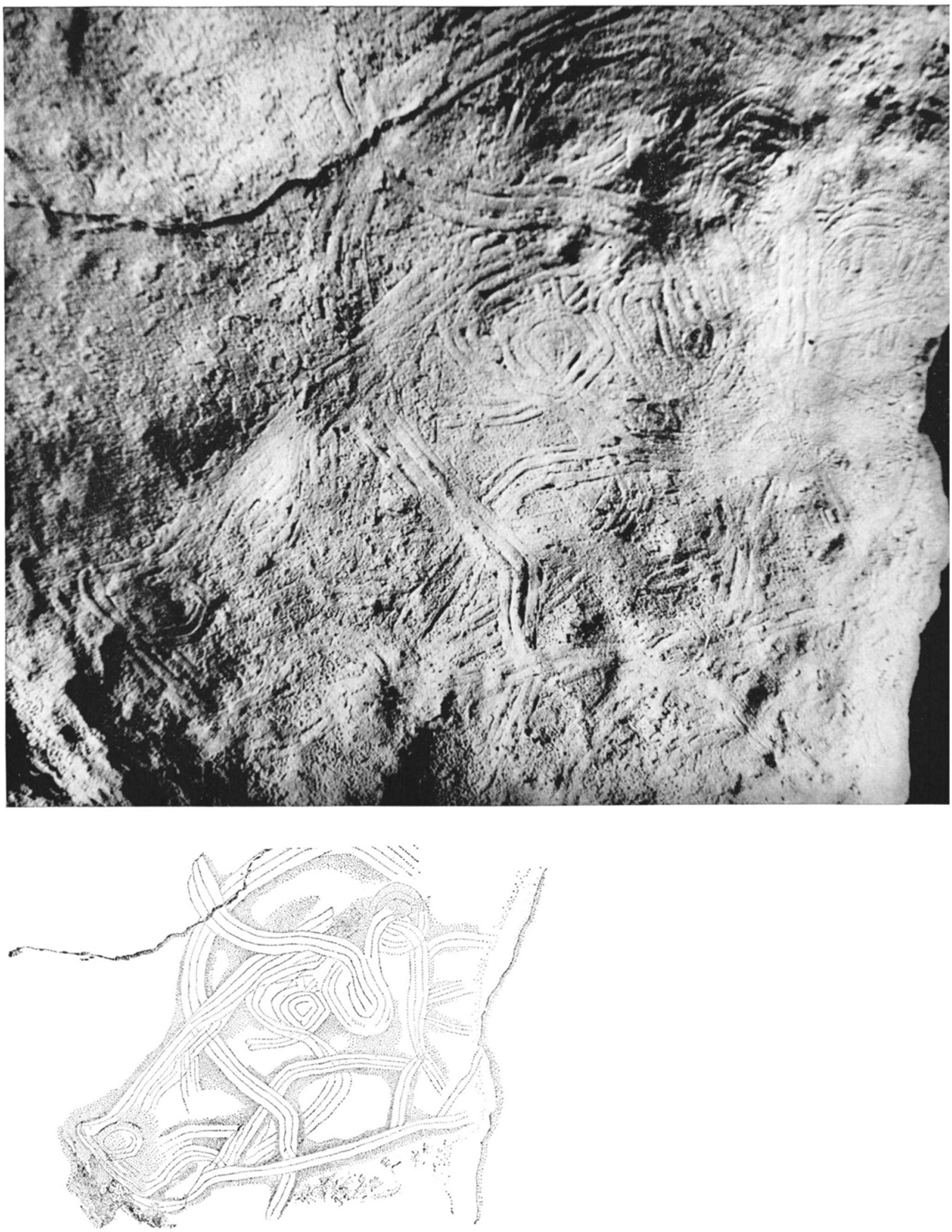
Certain figurations such as those in Pech-Merle clearly stem from the very earliest beginnings of artistic expression. The outlines of the animals are rough. Only those particulars which were considered absolutely essential are given greater emphasis. In a short, low arm of this cavern, not far from the present entrance, is a small clay drawing of the giant stag, *Cervus megaceros.* It can with certainty be attributed to the early Aurignacian period. The only part on which great care has been expended is one section of the huge antler (which measured in nature approximately six feet). This section is the blade used by the animal to scrape the snow from the mosses on which it fed. The body of the animal (1.2 m.) is scarcely more than a loop. "The head is reduced and treated summarily; neither mouth, nor nostrils" (Lemozi, 1929, p. 73). This disproportionately small head is characteristic of many Aurignacian representations. The legs are reduced to mere strokes. In the Abbé Lemozi's drawing the lines which cut across the figure of this giant stag stand out more clearly than in the photograph. It is possible, as Lemozi

believes, that they represent fragments of the outline of a hind (p. 74). These striking vertical lines which cover the animal are difficult to interpret. The white dots which appear in the photograph were made by modern visitors. Near this recess is a niche containing primitive representations of hands belonging to the same stage of development

Drawing by Lemozi (*cf. fig. 186*)



187. LASCAUX: *Aurignacian stag in the Great Hall*



188. ALTAMIRA: *Musk ox from right gallery. With drawing*

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299, **409**, **457**

A further formal development of the *Cervidae* may be seen in a little group of Aurignacian stags painted on the left wall of the Great Hall of Lascaux. These are among the oldest paintings in this cavern. Extremely small, painted in red ocher, they stand like miniature animals between two of the giant bulls. Their bodies are more carefully elaborated than the body of the *Cervus megaceros* in Pech-Merle, and each animal, as well as the entire group, is shown in movement. Amid the web of lines on the ceiling of the Hall of the Hieroglyphs at Pech-Merle only one animal can be distinctly recognized: a mammoth. Across it fall the heavy breasts of one of the headless female figures. Its outline, like that of the giant stag, is crude and rudimentary.

The musk ox of Altamira

left

A highly refined version of the clay drawings of this early period can be found in the head of a bull — *Ovibos moschatus* — in the cavern of Altamira. This is amid other figurations upon the low, partly collapsed ceiling near the main hall of the cavern. The head of this musk ox is completely woven into the meandering lines which traverse the ceiling for a distance of some fifteen feet. Like these meanders, the outline of the animal's head is made up of two or three parallel grooves. The muzzle, nostril, and, above all, the eye are drawn in the clay with astonishing expressiveness. Every detail of the outline of the head is depicted with an unerring hand.

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From another place on the same ceiling it is possible to gain insight into the way lines were traced on the yielding clay without taking on a definite form. It may be that the threefold outline in the center was the beginning of a head of a bison, or it may have been intentionally left as a fragment, or perhaps its shape came about by chance. We must be on our guard against too obvious associations. The fascination here lies in the emergence of a form from a line.

The cavern of Hornos de la Peña

302

It is probably in the remote cavern of Hornos de la Peña (Santander) that the development of these drawings in clay can be most clearly followed, despite the smallness of the space. In a narrow niche (about 40 x 60 cm.) three curves are drawn in the clay. Four branches of these threefold curving lines meet in a point.

189. HORNOS DE LA PEÑA: *Rock face with head of bison, ibex, and head of hind*

190. HORNOS DE LA PEÑ A: *Ibex*, *detail of fig . 189*

Drawing for fig. 189

297

On the adjacent projecting rock is the recently mentioned hind with a triangular head whose broad outlines run partly over and partly under the lines which cut across it. The curving edge of the rock provides a backbone for the animal: an early example of the later widespread use of natural rock formations as form givers.

303

Near it is the fragment of a bison head with a centimeter-wide outline, wherever it is not covered over by encrusted deposits. The upper part of the head is indicated by a curved line from which the horn projects without any interruption of the curve.

Immediately adjacent to it is an ibex, also highly simplified and with a thick blurred outline, like the bison's head. As so often, the horns are strongly emphasized. The single leg is not added separately as in the case of the giant stag of Pech-Merle: it grows out from the two curves of the neck line and the belly. This indicates a later stage of the Aurignacian development. Although still primitive, there is a quality in its treatment and a certain grandeur in the delineation which approach the art of a painter: yet its dimensions are extremely small: the bison's head twenty centimeters, the ibex's head about twenty-five.

right

Narrow niches in the walls of the so-called "Diverticule Breuil" contain three more figures which also show signs of a later development of clay drawing: here in association with natural crevices of the rock. The figures depict a horse, a snake, and some other animal's head.

260 col

The dominating figure is the horse. The snake, which swings down from above, is crudely indicated with a deeply incised outline. The unknown animal's head partly overlaps the hindquarters of the horse.

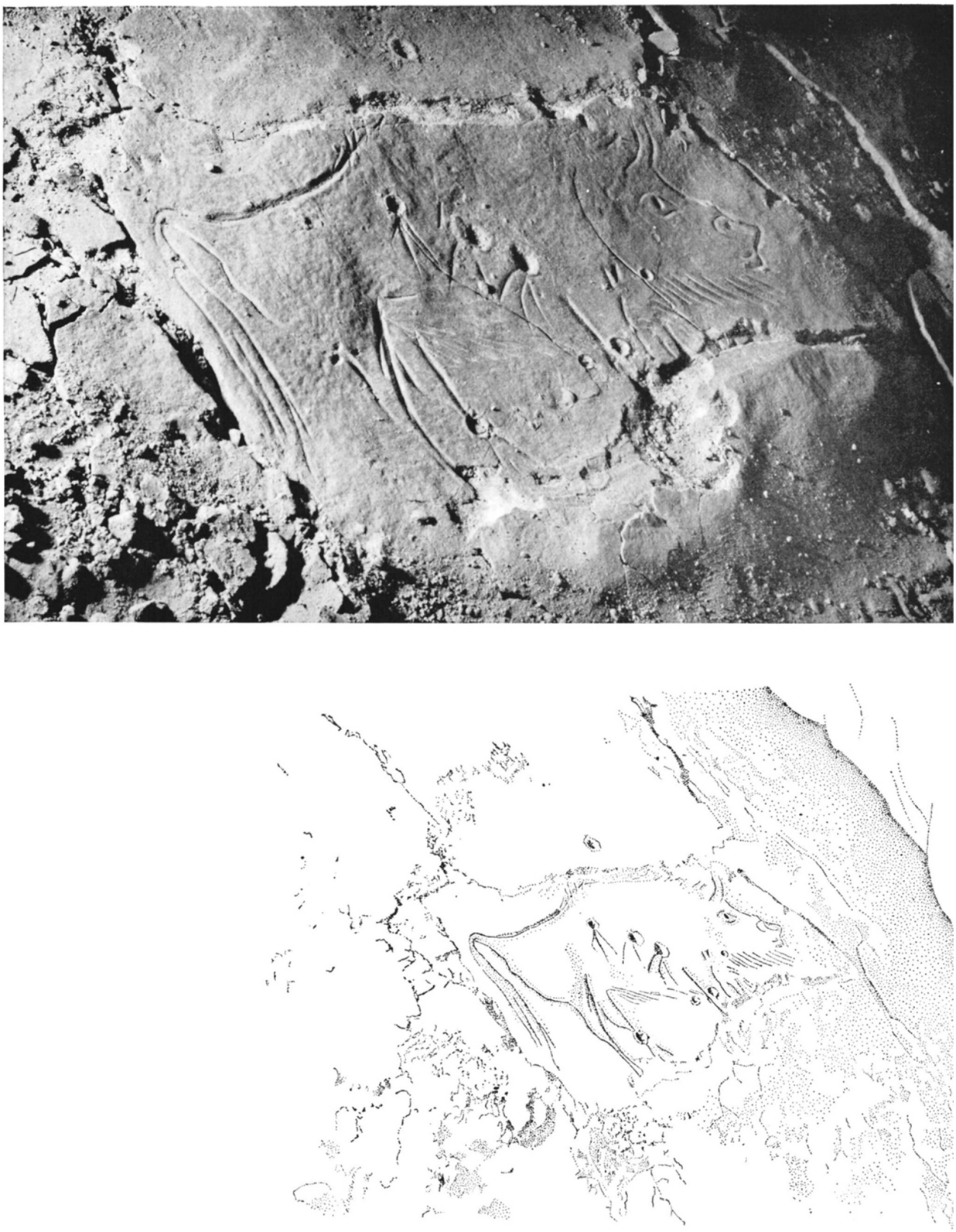
This representation is unquestionably the latest of this series, as can be seen in its development of certain characteristic elements.

The bison of Niaux

94, 51

Clay drawings of animals appear in other caverns as well, in La Clotilde de Santa Isabel (Santander), Gargas (Hautes-Pyrénées), Rouffignac (Dordogne), and elsewhere. These may have begun with those short undulating strokes that we have termed exclamation marks, but here we are concentrating upon representations of animals themselves. The most grandiose display of outlines in clay is the clay ceiling of the Hall of the Hieroglyphs at Pech-Merle. Clay drawings did not entirely disappear even in the Magdalenian age, as is shown by certain examples in Niaux and Bédeilhac (Ariège), and in other places.

191. HORNOS DE LA PEÑA: *Snake, animal head, and horse. With drawing*



192. NIAUX (*Ariège*): *Magdalenian clay tracing of a bison. With drawing*

left

The incredible sensitivity, power of expression, and mastery of detail with which the Magdalenian artist could draw in clay is illustrated by the figure of a bison drawn on the floor of the cavern of Niaux. Every particle of the animal vibrates with intensity:

eye, muzzle, indications of the pelt, treatment of the hindquarters, with the characteristic angle of the attachment of the tail, all convey long experience with painting and sculpture in relief. Three arrowlike forms on his flank terminate in circular hollows which had been formed by drops of water falling from above.

Apart from such exceptions, clay drawing early yielded place to engravings on the rock walls.

OUTLINES PAINTED IN COLOR

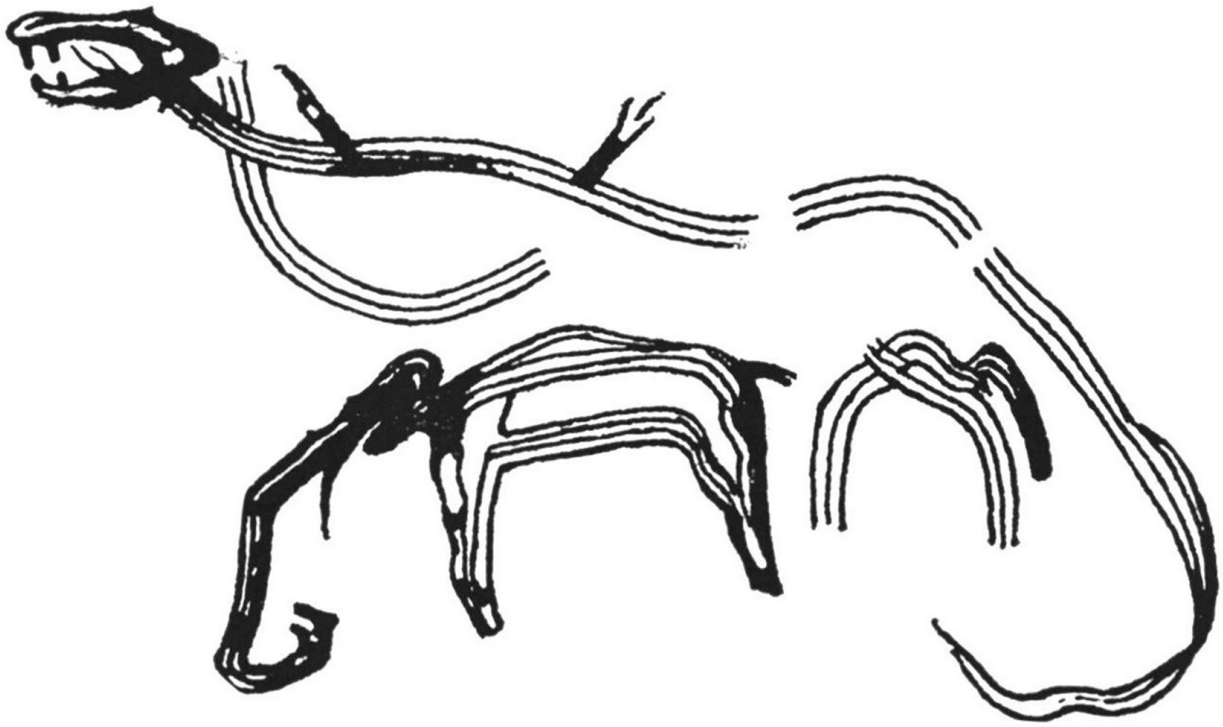
There are very few places where the transition can be followed from engravings in clay — the long meanders and outlines of animals — to the beginnings of painting. Among these few are the caverns of La Baume-Latrone (Gard) and La Pileta (Málaga) in southern Spain and the rock shelter of Croc-Marin in the forest of Fontainebleau (Seine-et-Marne).

This transition from lines scratched in the cavern clay to painting came about by using the same clay as a painting medium. It was taken up in the hand; the fingers stroked the bare rock wall and left reddish bands on the gray stones. As was ascertained at Baume-Latrone, long stretches of the animal's outlines were drawn "in a single stroke," as Dr. Drouot said (1953, p. 19).

Within a year after their discovery in 1912, Breuil had made tracings of the serpentine forms and primitive animals of La Pileta. He regarded these as the oldest figurations of this famous cavern: they also were drawn on the rock walls with clay-covered fingers. Recently J. L. Baudet (1951) discovered some stylistically similar paintings in the rock shelter of Croc-Marin: a stag with antlers in "warped perspective" and an anthropomorphic figure. It is true that these were painted with a mixture of resin and ocher, but the technique of painting is just the same as at Baume-Latrone.

149

The well-known pair of pregnant horses with thick black painted outlines in the large hall of the cavern of Pech-Merle is assigned to the Aurignacian or early Perigordian period. Exactly where they should be placed is rather doubtful. The sure and fluent outline of their backs and bellies, as well as the fragmentary attempt to employ color upon their heads and necks, would indicate a not too early date.



193. LA BAUME-LATRONE (*Gard*): *Reddish clay outlines on rock face: serpent and Elephas antiquus. Drawing from E. Drouot, 1953*

The cavern of Baume-Latrone

An insight into the earliest beginnings of painted outlines is offered by the extensive representations discovered in 1940 in the cavern of Baume-Latrone on the banks of the Gardon River, about nine miles from Nîmes, in southern France. They are in a chamber named after the Comte Bégouën, at the very end of the cavern, over two hundred meters from its entrance.

Here the first steps were taken in painting, when man was still groping to find a way to handle form and color. This is precisely why they are so instructive. Aside from the paintings, the ceiling of this chamber has several of the usual long meanders and a few exceedingly primitive and scarcely distinguishable animal outlines drawn in the clay. In addition, there are some of the rare positive impressions of hands: four left hands and one right. The whole environment bespeaks the earliest beginnings of art. When one compares the primitive clay drawings of the animals here in Baume-Latrone with those of the cavern of Gargas, it seems possible to conjecture that the direct positive impressions of hands came earlier than the more subtle negative impressions.

The only consideration here is the effort to employ clay as a medium for painting. Broad bands of reddish cavern clay are spread across the lower parts of the vaulted ceiling. They represent a series of animals drawn as individual figures beside one another or superimposed over one another.

Dominating the whole scene is a serpent over three meters in length. Attempts have been made to determine its zoological species, but it is better not to strive for too great scientific accuracy. Its astonishingly huge body ends unmistakably in the head of a beast of prey equipped with gigantic fangs. The whole is a product of the imagination, one of the composite creatures so much favored throughout primeval art. It arose from the same source of human fantasy that later gave birth to the dragon, and which here appeared at the very dawn of art.

194. LA BAUME-LATRONE: *Elephas antiquus. Drawings from E. Drouot, 1953*

309

Above and beside this mythical serpent are several elephants, which Bégouën took to be *Elephas antiquus*, the ancestor of the mammoth. These are the most numerous of the various types of animals depicted, and no one is like another. One has the trunk stretched forward in a sort of zigzag, another has it raised as though in anger, and in a third it is in a normal hanging position, such as subsequently became usual in representations of the mammoth. For each of these animals a different method of presentation was attempted. Drouot has depicted each separately (1953, pp. 28–34). Only one is selected here: it has a bulky head, a hanging trunk, a slightly curved back, and a tapering hind leg. Neither tusks nor belly are shown.

Besides the huge serpent, there is still another mystery animal (not in the drawing): it has a vigorously curved horse's body with an elephant's trunk. "A horse transformed into the silhouette of an elephant, or a mythical creation?" queries Drouot (p. 25). Probably the latter.

327

These tentative twofold and threefold outlines already contained the germ of what in later Aurignacian art would become expressed by a single sweeping stroke: the mystical fusion of different animals into one undefinable whole. The most highly

developed figure of this kind is the composite symbol of a rhinoceros, three gazelle, and a lioness in the almost inaccessible sanctuary of Le Combel, Pech-Merle.

Certainly the drawings at Baume-Latrone show an effort to break away from the limitations of engraving on a background of clay and to use the greater freedom of color and line to depict those objects of man's environment which were of importance in hunting or for ritual purposes. At the same time, man was not content merely to record their visual appearance, whose form he had neither the skill nor the technique to master, but he was irresistibly drawn, even then, toward myth and symbol.

after 398

Although no man-made implements were found at Baume-Latrone, Breuil and Bégouën both agree in assigning these drawings "to an early stage of Aurignacian art (Breuil, 1952, p. 212). This is expressed by their artistic positioning: the animals at Baume-Latrone are still floating indeterminately in space. They are totally unrelated to one another. Primeval art had a long road to travel from this Chapel of the Elephants, as it might be called, to the perfected outlines of the composition in the Chapel of the Mammoths at Pech-Merle.

OUTLINES INCISED IN ROCK

The attainment of an ever-increasing mastery of the outline was the major preoccupation of primeval art from the very beginning to the very end.

To capture the essential characteristics of an animal within a single expressive outline demanded great artistic concentration.

Outlines impressed in clay represented only the first stage. Outlines incised in rock were the natural consequence, starting with rough deep furrows hacked into the stone (e.g., Belcayre) and reaching to hair-fine Magdalenian outlines breathed upon the rock surface (e.g., Le Gabillou). In addition, a loosening of the outline took place in the Magdalenian era and it was used to define textural quality. The process had its beginnings in the Aurignacian-Perigordian cycle.

Outlines incised in the rock were sometimes complete in themselves; sometimes they were emphasized by color; sometimes they were used to add detail to certain parts of a painted figuration.

The rock shelter of Belcayre

312

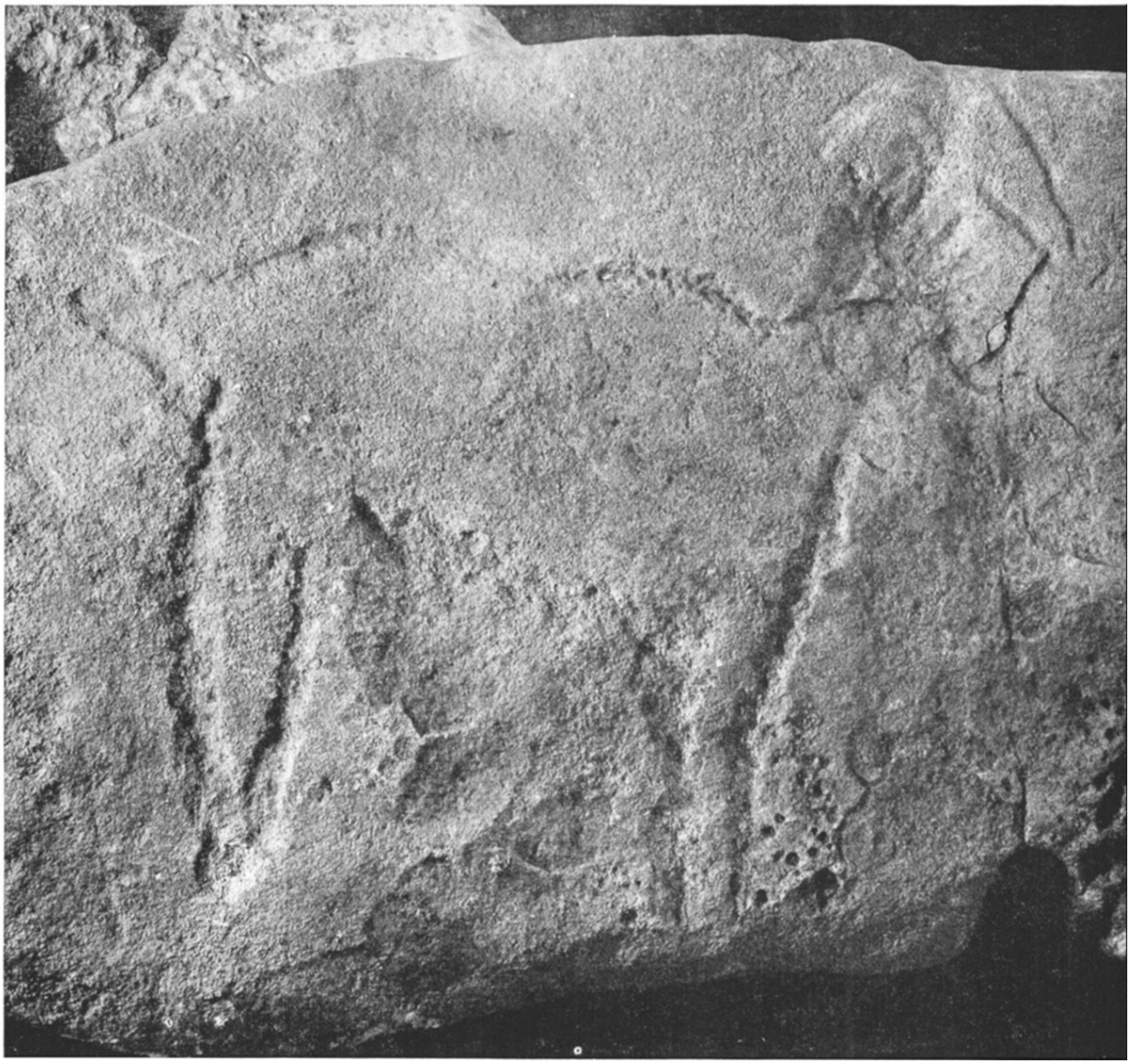
The figure of an animal on a limestone block from the rock shelter of Belcayre (now in the museum of Les Eyzies), though of poor quality in itself, gives some insight into the technique employed in the middle Aurignacian period. It can be approximately dated,

since its excavator, F. Delage, states: “The objects found directly above this engraving belong to the middle Aurignacian period” (1934, p. 392).

186, 317

“The animal belongs to the family of *Cervidae”* (p. 389) but its exact species cannot be determined. It is only a crude silhouette, though already tending towards the differentiated outline. This becomes apparent when it is compared with the outline of an animal from La Ferrassie, to which is related a number of fertility symbols. The outline of this animal is more replete with life. In comparison with the three bison from the ceiling of the cavern of La Mouthe (Dordogne), it can be seen that the Belcayre animal has not yet attained as smoothly flowing a quality of outline, though the La Mouthe bison, like it, have only vague indications of their exact species. These comparisons establish the early period of the Belcayre animal.

Its deeply incised outline reveals the technique of the Aurignacian sculptor. Since it was apparently left unfinished, “the procedures employed by the sculptor are easily discernible. The tool used was not a burin but a hand ax. . . . In several places the blows of the hand ax have hacked out small conical hollows. The outline of the body was effected by means of a sort of coarse furrow” (Delage, p. 300). These hacked-out hollows made by the hand ax were later joined together. At the neck and the head we can discern the use of a burin.



195. BELCAYRE (*Dordogne): Deeply incised outline of animal on limestone block*

A hand ax from Sergeac (Dordogne), in the same neighborhood, shows how admirably this flint tool was adapted to the human hand. It can even be determined which hand was used. Only when this hand ax is held in the left hand do all four fingers and thumb find their place so that a full blow can be delivered such as might hack out conical holes in the stone.

The cavern of Ebbou

[27]

The cavern of Ebbou (Ardèche), in the canyon of the Ardèche River, with its walls of limestone and fantastic formations, lies approximately twenty-two miles from the valley of the Rhone. Deep within it is a long hall with engravings, discovered in 1946 by the Abbe Glory. They constitute another example of the utmost simplification of the outline. Some of them deliberately abstain from all rendering of detail. They have advanced so

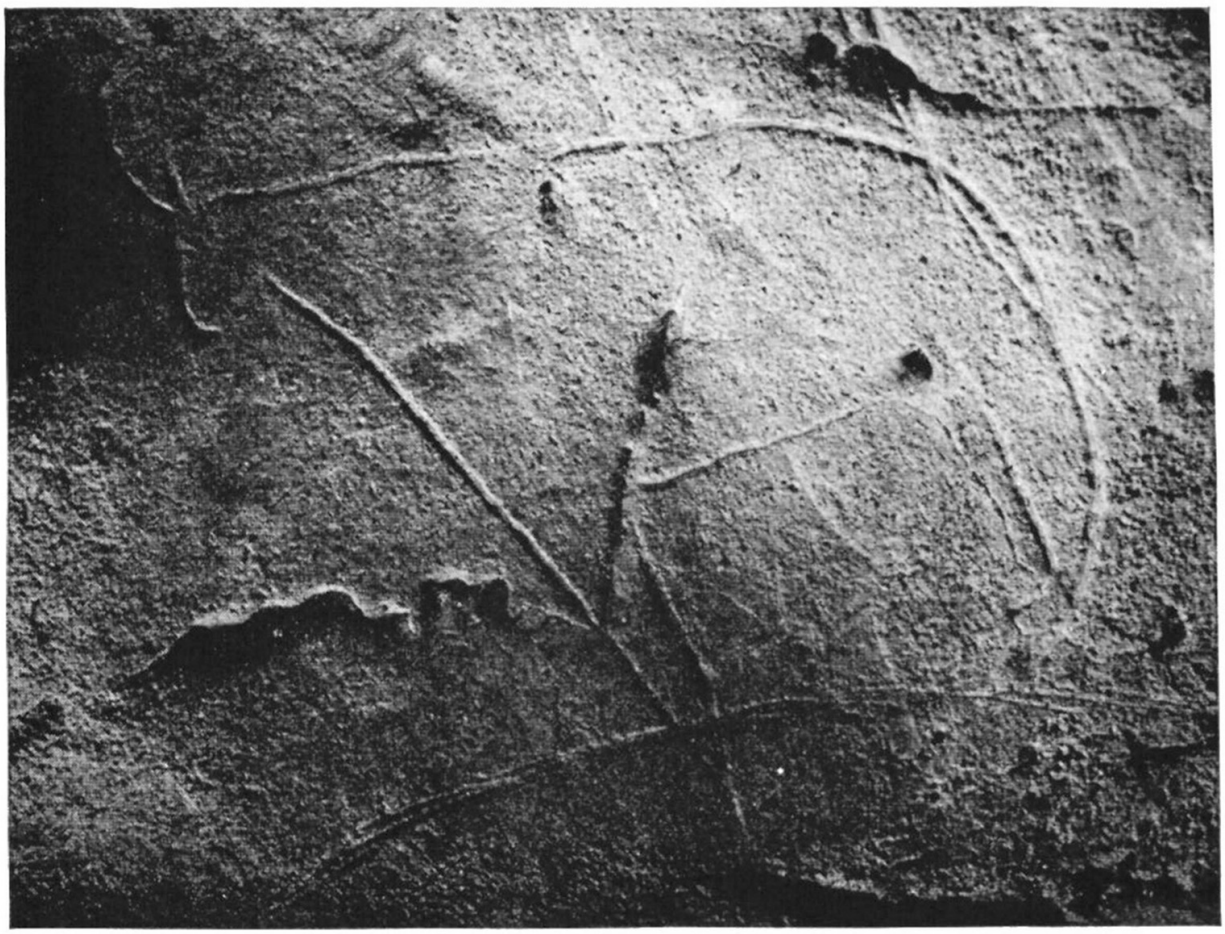
far in abstraction—just as in the case of the charging bison of Pech-Merle — that the question arises whether we really are confronted with the work of an early period. However, on looking closer we become conscious of the austere features of Aurignacian art.

70, rt.

The individual animals—here again horses predominate—did not all originate at one time. That the horse with upward-sloping back and crossed front legs (shown earlier in connection with representations of movement) belongs to a later period than other primitive scratchings is shown by its differentiated treatment. Here also belong some of the larger drawings of cattle as well as a small ibex with a single horn. This ibex is closely related to similar primitive outlines in the nearby cavern of Bayol (Graziosi, tr. 1960, p. 194, fig. 40). But that is not all. Primitive outlines of representations such as these of the first Aurignacian period are the means of expression at the beginning of art in nearly the entire world. Very similar scratched drawings are found in North Africa — and elsewhere. Their connection with the Mediterranean region, as stressed by Breuil and Graziosi, is undoubtedly pertinent. To draw animals in profile with a simplified outline seems a natural impulse of man.

196. LA MOUTHE (*Dordogne*): *Large bison, its back and tail drawn in a single sweep*

197. EBBOU (*Ardèche*): *Hind engraved almost entirely in straight lines*



198. EBBOU: *Ibex with back and hind quarters drawn in a single curve*

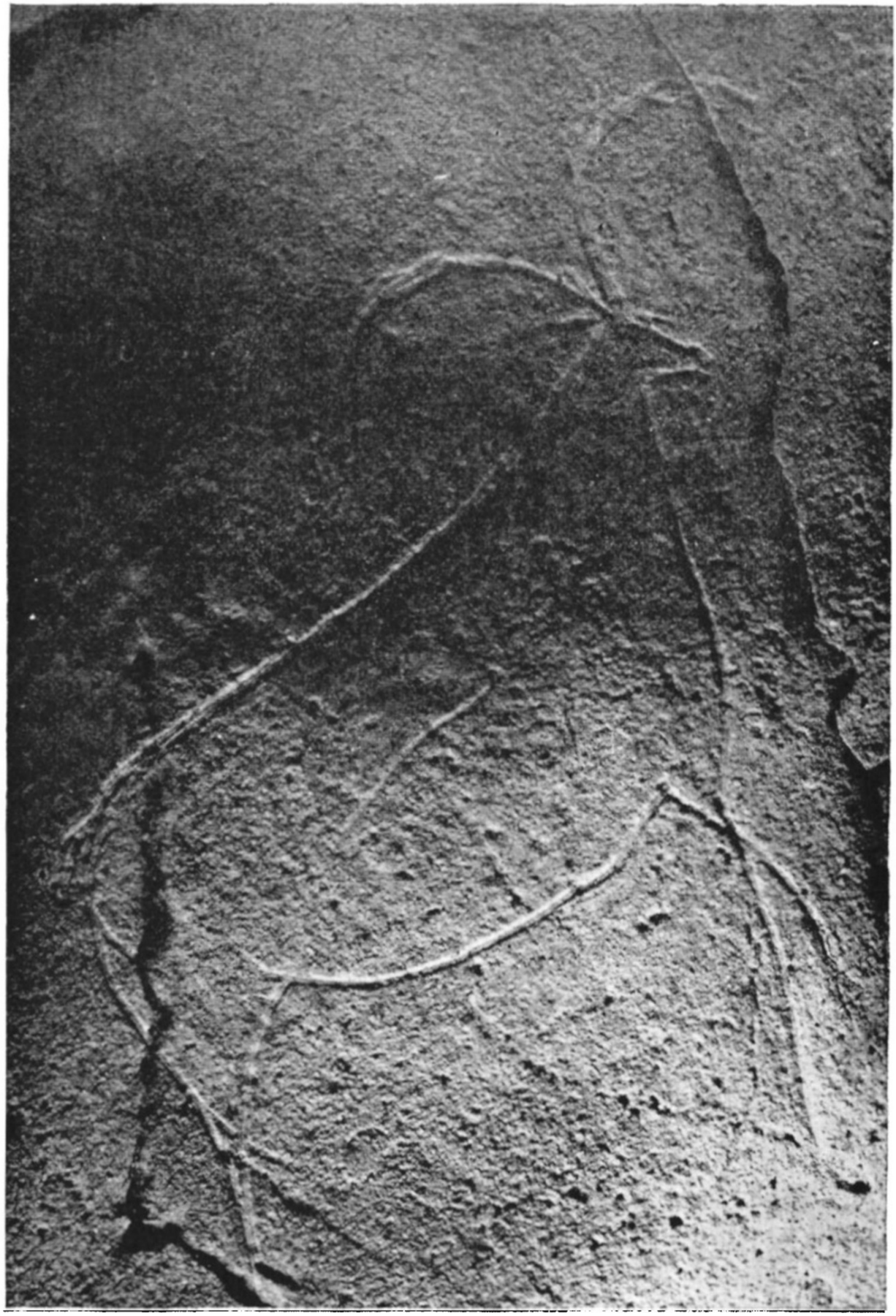
left

The most radical engraving at Ebbou is a delicately drawn hind outlined almost entirely in straight lines. The head: two strokes at an acute angle. The body: almost an acute-angled triangle. The long sloping back: straight, bent over only at the end to indicate the hind leg.

rt.

Finally an ibex: rather more curvilinear, with crossed legs and two large horns represented *en face* . Its whole posture and linear treatment betoken the same period.

To what period do these partially abstract engravings belong? To the beginning, the middle, or the end of the long Aurignacian-Perigordian cycle? The experts have been very cautious in their estimates.



199. EBBOU: *Ibex with crossed legs and large horns*

200. TIARET (*Algeria*): *Prehistoric engraving of feline. Drawing by F. E. Roubet, 1947*

201. LES TROIS FRÈRES (*Ariège*): *Three snow owls*

The snow owls of Les Trois Frères

above

Difficult of access, in the innermost gallery of the cavern of Les Trois Frères (Ariège), is a group of three snow owls: male, female, and their young one. All are as primitive as they are mysterious. It is not the single birds but the group that is so suggestive in its arrangement. The bodies of the parent birds are in profile, their heads full face. The young one between them is shown frontally, crossed by a straight, deeply cut line.

The male's large round head, with the outline of his ruff of feathers, his great eyes, and his protruding beak, is drawn with a few energetic strokes; a broad line — said to be part of the body of a mammoth—crosses partly over and partly under the neck of the male bird. In the female, the natural fluffing-out of her coat of feathers is decidedly indicated.

On the whole, the lines of this mysterious group are not so definite and determinedly executed as the configurations in the cavern of Ebbou, but even here one is conscious of

an ability to capture the outline of a living creature with assurance, even though in the most primitive fashion.

The cavern of La Mouthe

267 col

From its outset primeval art never shrank from large-scale representations. The clay drawings spread over the ceilings of the caverns of Pech-Merle or Altamira bear this out. The rock engravings of the Aurignacian-Perigordian cycle also depict scenes upon the vaulted roofs of caverns. Understandably, these are more modest in their dimensions: e.g., the ceiling of the first, low chamber in the cavern of La Mouthe (Dordogne).

319

Here various animals, mainly bison, are ranged in an organized group. To some extent the contours of the backs of certain animals are interrelated. The steeply rising back line of the largest bison, nearly three meters in length, is carried on by the back line of the next, much more fragmentary, animal and even by the badly weather-worn bison behind it.

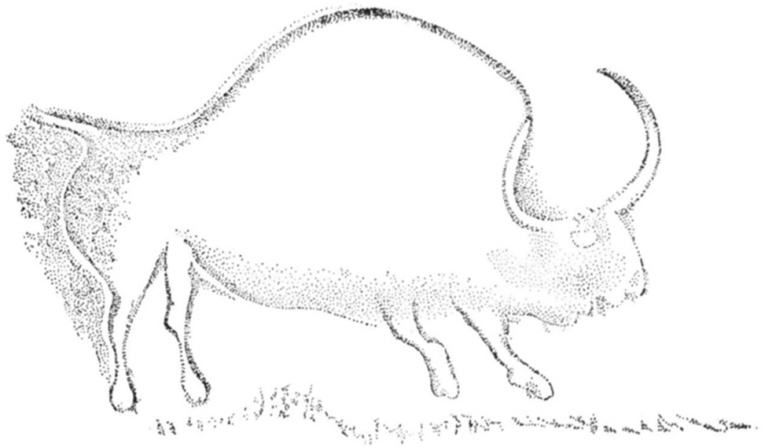
313

The deep, broad lines of the contours still betray the habit of working in clay, which accepts every impression so effortlessly. It is not possible to assign it any precise date, but there are signs that point to a less developed stage of the Aurignacian-Perigordian period. The outline is handled just as simply as in the first stages. But it is more energetic and dynamic. This is particularly marked in the case of the large bison. One sweeping line runs from the tail over the humped back to the muzzle. The head is merely indicated and has none of the massiveness of later times. Only the outline runs through. The eye and particularly the horns are difficult to make out. A telling detail is the carefully elaborated hooves. The surface of the body is as completely featureless as a piece of cloth stretched over a frame.

413

The animals are so arranged that the lines of their backs describe part of a circle. Only with the use of a wide-angle lens was it possible to photograph this low ceiling as a whole and thus bring out its total rhythm and the relations of the figures with one another. This gives the scene a different and somewhat contradictory aspect to the drawing made by Breuil (1952, p. 294), in which the animals appear to be ranged more or less in a row. In addition, all the animals are no longer so visible today as when the Abbé made his first tracings in 1900. The beginnings of a circular composition, which can be detected here, were developed later in the Solutrean and Magdalenian periods,

both on a small scale (e.g., at La Pasiega, Santander) and on a large scale (e.g., on the rock vaults of Lascaux).



202. LA MOUTHE: *"Bison de la découverte" — the first prehistoric rock engraving recognized as authentic* (*1895*). *With drawing*

203. LA MOUTHE: *Three animals —beginning of circular composition*

204. LA GRÈZE (*Dordogne*): *Bison*

318, **above**

A comparison to this low ceiling in the cavern of La Mouthe may be provided by the small figure of a bison (85 cm.) engraved on the rock face not far away. This *bison de la découverte*, found in 1895, is well known as the first prehistoric rock engraving to be accepted as authentic by the prehistorians. Without giving any very definite reasons, Breuil assigns this bison to the Perigordian era. In any case it could not belong to the late stage of the Aurignacian-Perigordian period. In comparison with the circular composition of the low ceiling, the delicacy of its outline is very striking. Hooves, tail, and head are well defined, and the horns very carefully incised. The heavy obesity of this aging bison is greatly exaggerated. Taken all in all, it would seem to be an attempt at characterization without the ability to achieve it. This small bison has often been compared to the bison at La Grèze, but the resemblance appears only at first sight.

RITUAL IMAGINATION IN THE AURIGNACIAN-PERIGORDIAN ERA

One is constantly astonished by the variety of imagination revealed in primeval art: the invention of configurations and scenes for which no image existed in nature. These

ritual fantasies came into being with the desire to enter into some relationship with the invisible — a desire that was surely most compelling, to have brought about such a wealth of symbols, whether composite symbols, hybrids, or composite images of animal-man.

In the Aurignacian-Perigordian era we stand at the beginning of art. Throughout this very long period man was able to express objects only by means of simple outlines. This makes it all the more astonishing that, despite this, he was able to depict images arising from his imagination. As the treatment of the outlines indicates, the sanctuary of Le Combel in the cavern of Pech-Merle belongs to this period of earliest art and by no means to the end of the Aurignacian-Perigordian epoch, as some have considered.

The sanctuary of Le Combel, Pech-Merle

The sanctuary of Le Combel, which forms part of the cavern complex of Pech-Merle, was discovered in 1949 by André David. When a boy, the same André David, who came from the nearby village of Cabrerets, had discovered the main cavern of Pech-Merle. Le Combel is the most mysterious part of Pech-Merle and gives us a rare insight into the fantastic representations of that time. *A combel* is a depression. David had noticed a slight depression in the ground not far from the present entrance to the cavern. He dug down several meters, removing the rock debris, and finally reached a hitherto unknown gallery which, through some natural catastrophe, had become blocked off from the rest of the cavern. In addition to vestiges of predatory animals, David found farther on, amid a chaos of fallen stones and stalactites, the sanctuary of Le Combel, whose three sections are separated one from the other.

323

The first section is a painted scene situated barely half a meter above the clay floor. Here, in red outline, a lioness and three horses are depicted, all surrounded by seventeen red dots (*ponctuations*). The lioness (1.40 x 0.57 m.) is mortally wounded. Blood flows over her head and muzzle. The taut hind legs of this beast of prey stretch out rigidly behind her. The intensity with which this moment of death is recognized and presented is amazing. Beasts of prey are represented spitting forth blood in Les Trois Frères and in other places, but nowhere is the relation with the dreaded carnivore so dramatically portrayed as at Le Combel.

below

The stricken lioness' tail is raised high, as is shown on the Abbé Lemozi's drawing. The space is so small that both draftsman and photographer were obliged to lie recumbent in a muddy ditch to get a full view of the scene.

The three horses are depicted with a minimum of detail. No eyes or muzzles are shown, only the bare outlines and an indication of their manes.

What mattered more than anything else to the artist of this scene was the curious association of the wounded beast of prey with the three horses and their surrounding aura of red dots.

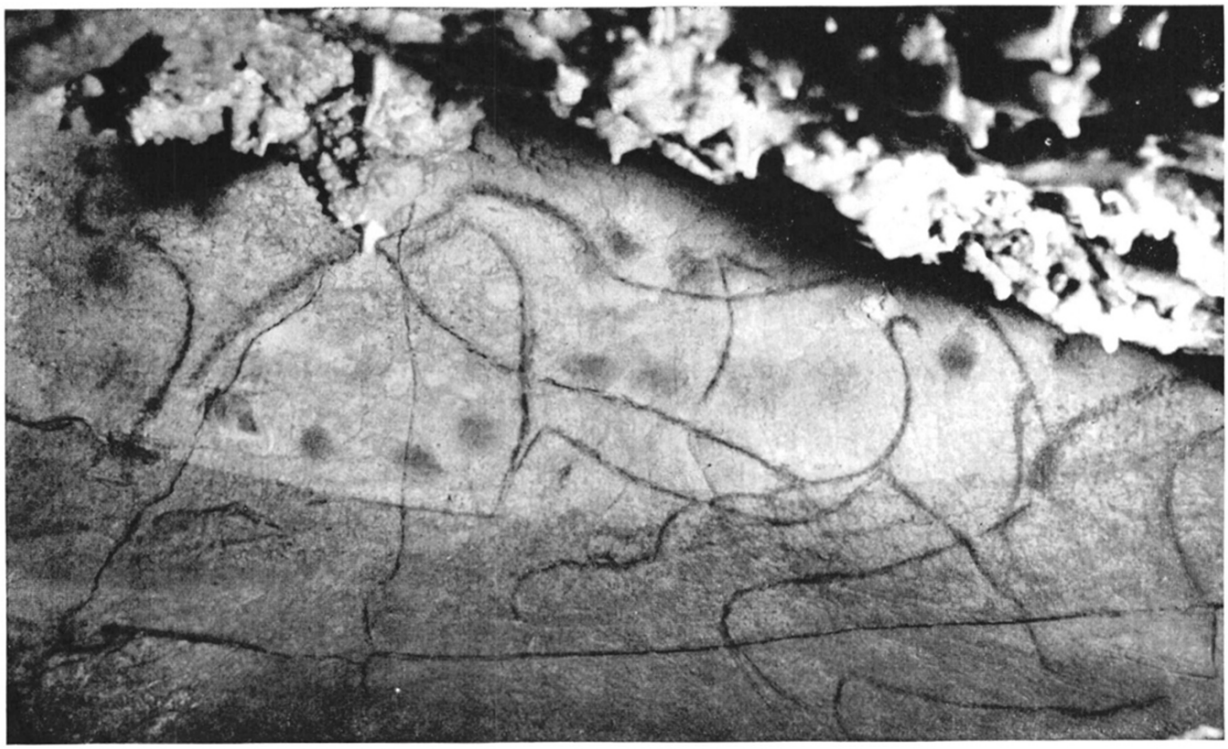
215

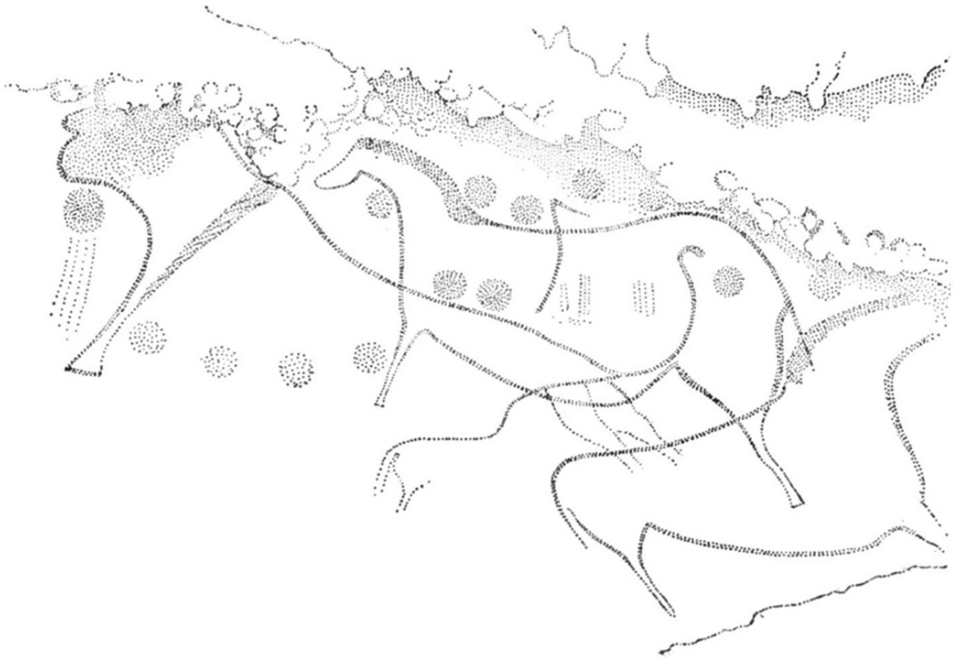
The height of the gallery sinks gradually from ten to barely two meters. There is an intermediate scene that serves as an introduction to what is yet to come. This consists of various constellations of large red *ponctuations:* approximately one hundred and fifty were counted by Lemozi. One group of twenty surrounds a stalactite the shape and size of a woman's breast.

325, 327, below

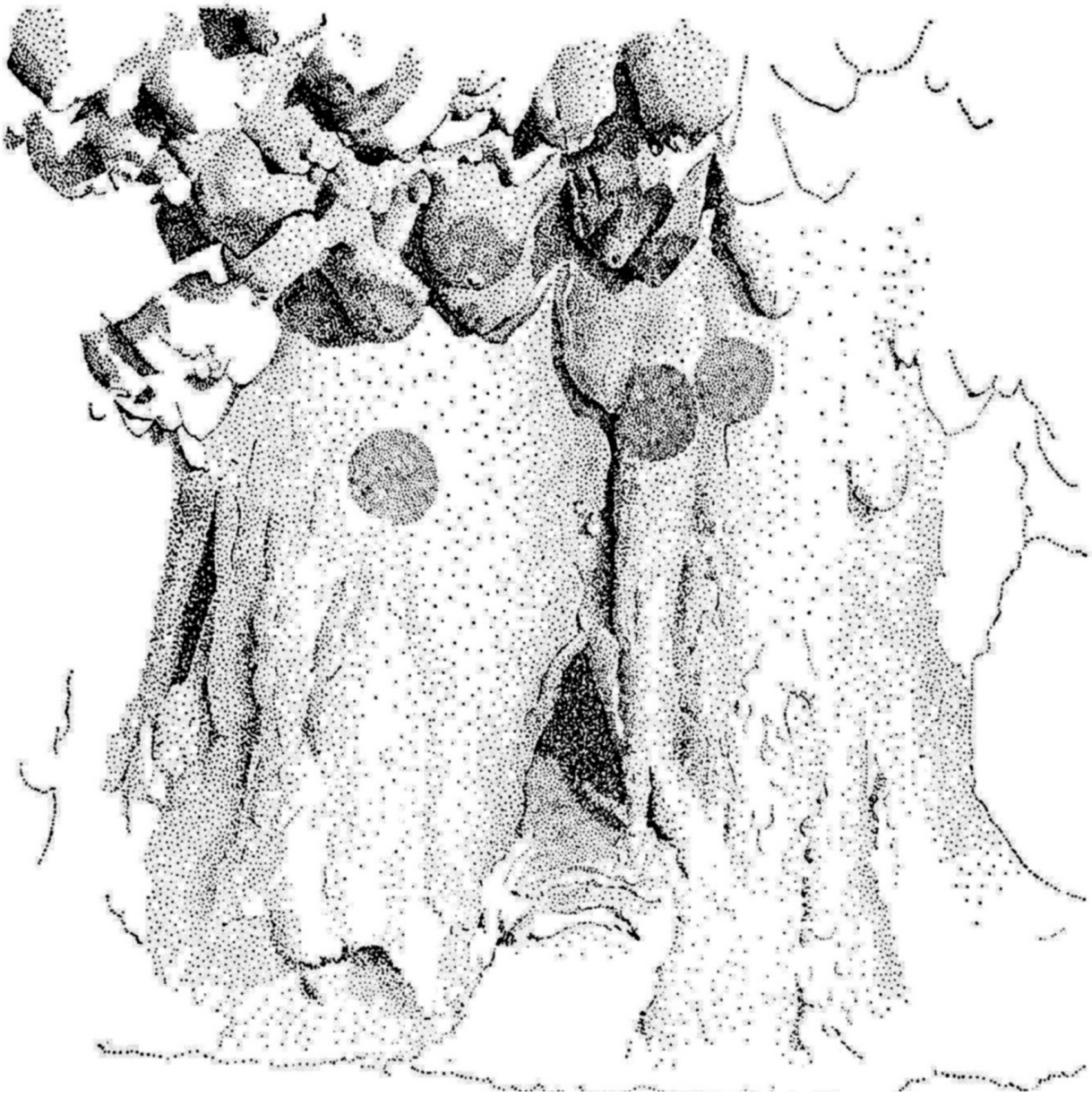
By crawling farther through an extremely narrow opening one enters a bunkerlike space, barely eighty centimeters high. Here one discovers a wreath of breast-shaped stalactites and a painted scene which forms the climax of the sanctuary. Surrounded by a variety of symbols is a drawing of animals inextricably interlocked. It starts on the left with the hindquarters of a rhinoceros with its ringlike tail and ends on the right with a lioness. Undoubtedly she, with her aureole of eight red dots, is the culminating point of the whole scene. Rising from this composite animal are three uplifted antelope heads. Their five bodies are knit into a single unit, bound together by a common outline. To the right Lemozi noticed a polished area containing a single red *ponctuation.*

Drawing by Lemozi (*cf. fig. 205*)

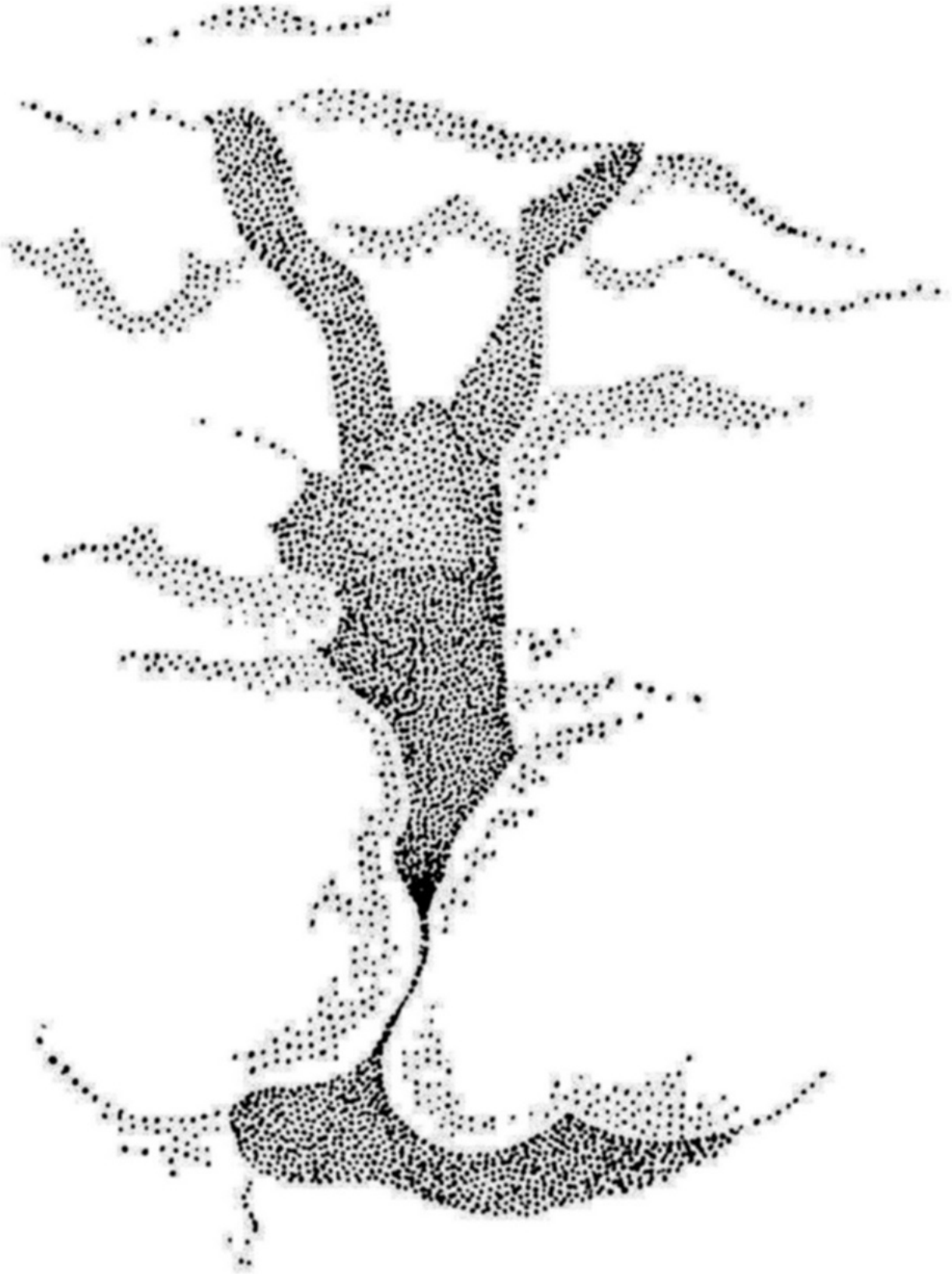




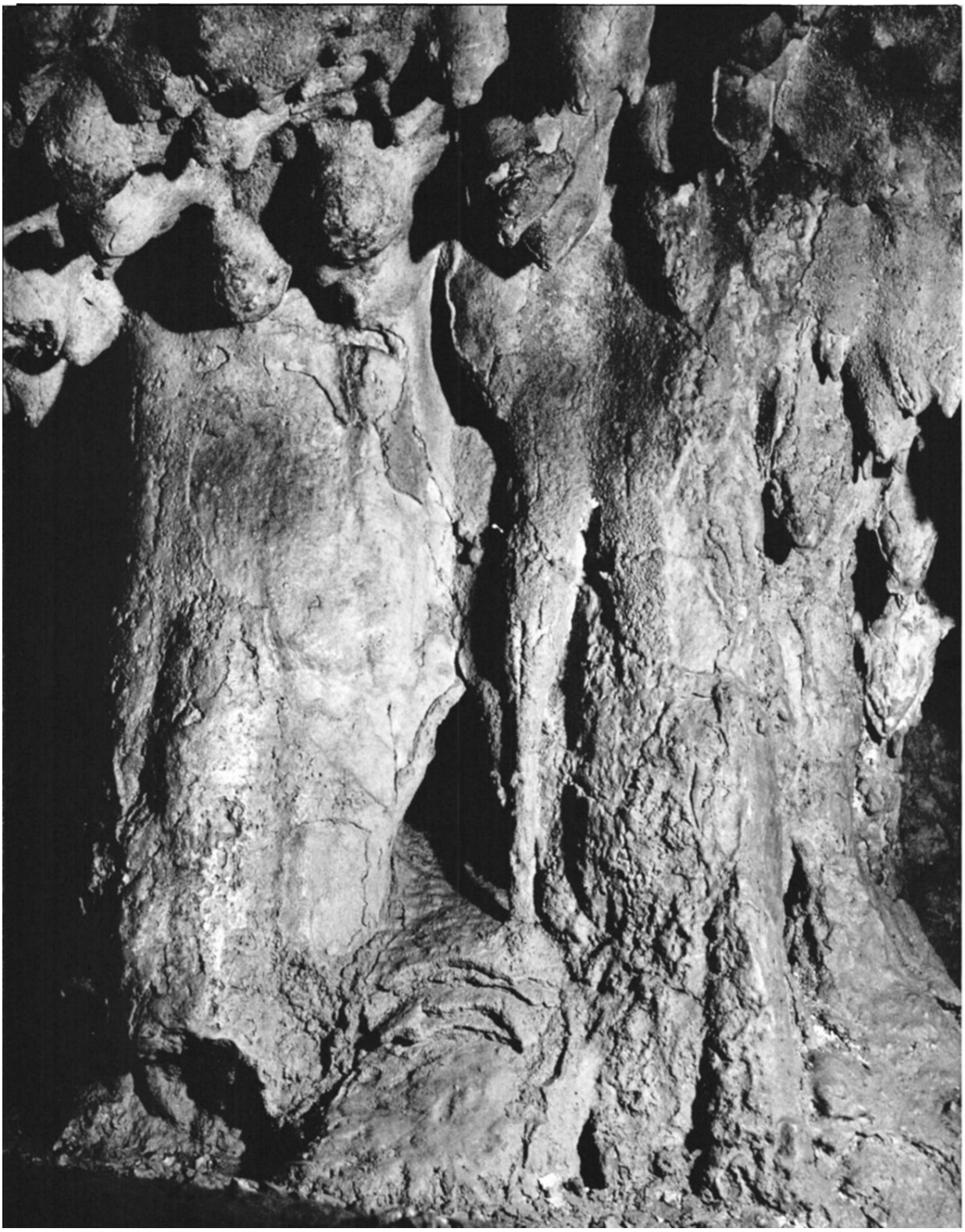
205. LE COMBEL, PECH-MERLE (*Lot*): *Wounded lioness, three horses, and many red dots. With drawing*



Drawing for fig. 207



206. DAREMBANG (*New Guinea*): *Rock opening, described as a vulva. Drawing after photograph by Frobenius Institute*



207. LE COMBEL, PECH-MERLE: *Black-painted stalactites in form of female breasts and triangular opening in rock* (*vulva*?) *surmounted by large red disks*

324

This scene is closely connected with some neighboring symbols, which all relate to the female sphere: eyes, the wreath of breasts upon the ceiling (partly painted black like

those of the Egyptian goddess, Selkhit), and, opposite to the painted composite picture, a natural triangle-shaped opening in the rock, surmounted by two large red dots. Lemozi's opinion that this opening represented a vulva came to be accepted as probable after very similar rock openings were found in New Guinea, which were undoubtedly meant to symbolize the female organ.

Whether this scene relates to a desire to obtain mastery over various animals, or whether it deals with certain *rites de transfusion* through which man sought to acquire the superhuman strength of the lioness, is an open question.

In our context it is sufficient to note the complexity of these highly esoteric representations in the midst of the Aurignacian-Perigordian period. The animals appear fragmentarily. Their bodies begin and then merge into a curious symbiosis. This representation of a fusion of the most varied species into one inseparable, composite organism almost seems as though man wanted to blend into an indefinable unity the graceful agility of the antelope, the massive strength of the rhinoceros, and the towering majesty of the all-amalgamating lioness, with her crowning diadem. It is probably better to leave the meaning of this scene indeterminate. Like almost everything else in prehistory, it falls within the domain of fertility rites.

Drawing by Lemozi (*cf. fig. 208*)

208. LE COMBEL, PECH-MERLE: *Composite animals: left, rhinoceros rump; middle, antelope heads; right, lioness with diadem of red disks. With drawing*

LATE AURIGNACIAN-PERIGORDIAN ENGRAVINGS

A horse from Pair-non-Pair

Not far from Bordeaux lies the little cavern of Pair-non-Pair (Gironde). It is only twenty-one meters underground and rather less than four meters high, beneath trees and surrounded by vineyards. Its rock engravings have acquired a special importance, since they are among the few which can be attributed with certainty to the Aurignacian-Perigordian period. The cavern was filled, almost to its ceiling, with stratified levels which gave its excavator, F. Daleau, a starting point for determining its date.

When one observes closely the animals depicted here, they seem to have neither the primitive simplicity of the earliest period nor the mastery of form of the end of the Aurignacian-Perigordian era. They fall between the two and, as G. Malvesin-Fabre recognized, "belong in all probability to the middle Aurignacian" (1947, p. 9). The little cavern was excavated very early, and its deposits were carefully examined. As early as 1883 Daleau had noticed "some engraved lines on the walls" to which he paid no attention at the time. It was only in 1896, after the rock engravings of La Mouthe had become recognized, that he started to inspect the little cavern, sprayed the walls with a pump from the vineyards, and discovered the first dozen animal engravings.

Only the two best-known groups will be discussed here: both are close to the entrance of the cavern.

330

The first: two horses, one following the other —the leader "a charming horse running to the right, perhaps a pregnant mare in foal; her two forelegs are joined, and there is only one slender hind leg. . . . This mare is followed closely by a stallion of far inferior drawing" (Breuil, 1952, p. 321) . This is therefore a fertility scene such as constantly recurs in prehistoric art.

331

The focus of interest is the expressive force of the head of the stallion: "the head is elegant, with rippling profile and delicate muzzle" (p. 321) . A triangular tapering of animal heads is familiar in early Aurignacian art, also the small size of the skull in proportion to the rest of the body. In this instance, the head is more elaborated and not as foreshortened as, for example, the famous ponies of Pech-Merle or the animals at Ebbou. The triangular form is retained; only the end of the muzzle has been pulled forward. This pointed head with its pronounced muzzle is very reminiscent of the so-called seahorses and has something of the refined simplicity of the horses on Greek Dipylon amphorae.

Most remarkable of all is the elegance and the élan of their outlines, especially the line of the back and mane of the first horse and the line of the neck and chest of the second. Their bodies are not treated negligently. They have already acquired well curved forms, though it cannot yet be said that all parts of the figures are held within one general sweeping outline.

This occasional uncertainty in the outline of the body was one of the reasons a wrong interpretation was accepted for the best-known animal figure of Pairnon-Pair.

333

This is a horse with its head turned backward. Its discoverer, F. Daleau, christened it the "Agnus Dei," since, at first sight, it bears an astonishing likeness to the Christian representation of the paschal lamb. "Its small delicate head is looking backwards; the rippling profile, big eye, slender muzzle, and a forelock sticking far forward are all visible" (Breuil, 1952, p. 321) . The head tapers swiftly toward the muzzle and the mane is sharply incised, as in the case of the other two horses.

"As regards the famous 'Agnus Dei,' it had been a real problem to us for some time," other scholars have written (David and Malvesin-Fabre, 1950, p. 140). Through the use of tangential lighting — *lumière frisée* — Malvesin-Fabre discovered that the back-turned head and neck belonged to a different animal from the rest of the body. The body, he shows, complements a very mediocre engraving of an ibex with its head bent low.

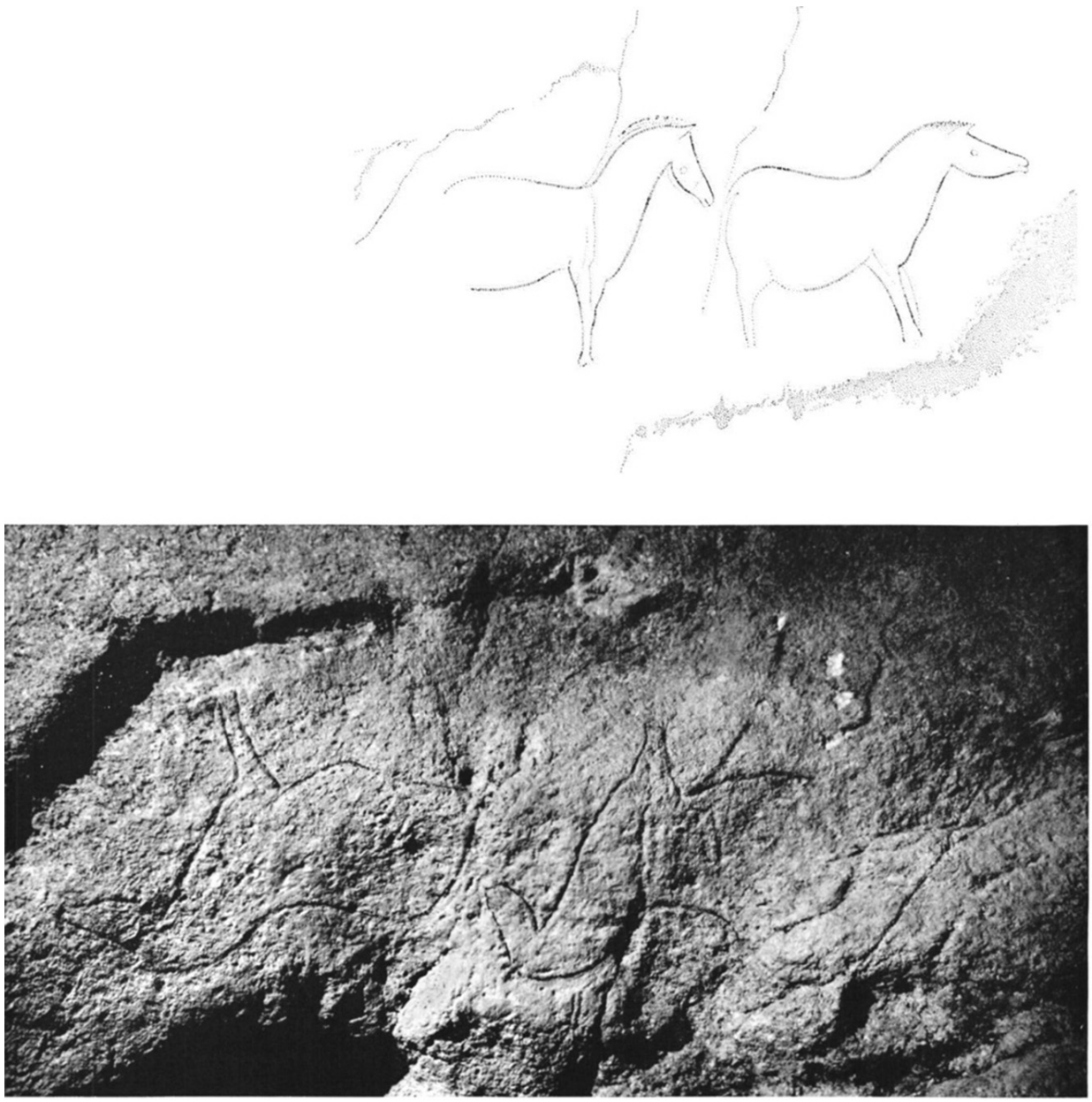
376, 55, 502

A reservation should here be made. The original interpretation of the "Agnus Dei" has some justification, since the deeply cut connecting line between the horse's neck and the back of the ibex cannot be denied. There are various instances in prehistoric art of connecting the head of one animal to the body of another. This does not in any way offend prehistoric concepts: e.g., in the Solutrean frieze at Le Roc de Sers (Charente), the head of a bison has been changed into that of a boar, and in the cavern of Les Trois Frères a reindeer body is represented with a bison's head, another reindeer has bird's claws, one bear has a wolf's head, another a bison's tail.

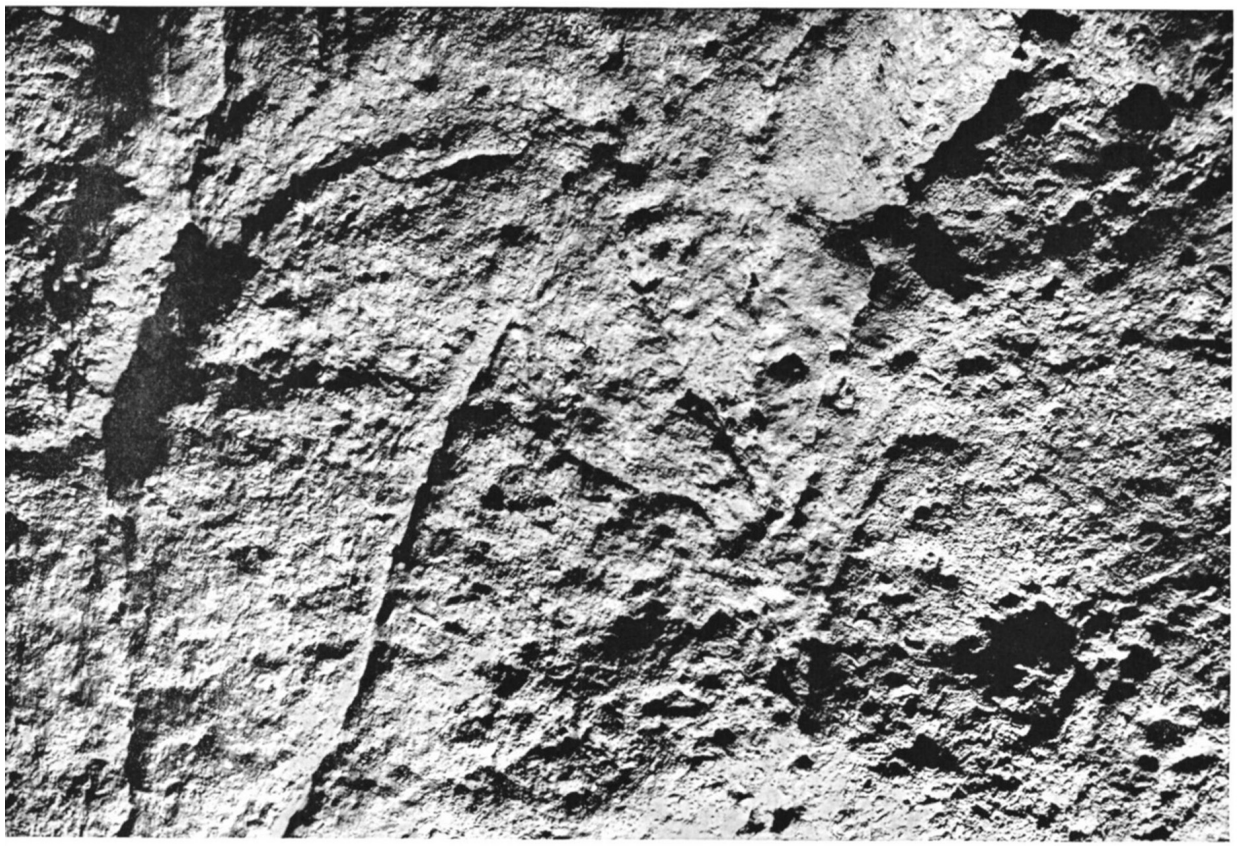
A pebble from La Colombière

334

An insight into late upper Perigordian art is revealed by several engraved pebbles dug up at La Colombière (Ain), some in 1913 and others in 1948. Only a pebble (12 x 8.2 cm.) found in the latter year by Bryan and Movius will be described here. It was discovered during a Harvard University expedition and is now in the museum at Ain. Movius states: "This object was found in definitely undisturbed deposits. . . . There can be no question concerning the fact that it was *in situ"* (Movius and Judson, 1956, p. 34): in other words, it lay in a late Perigordian stratum.



209. PAIR-NON-PAIR (*Gironde*): *Two horses, one following the other. With drawing*



210. PAIR-NON-PAIR: *Detail of head of stallion*

But the dating of this La Colombière pebble as Perigordian was recently questioned (Allain, 1958, p. 544), for, besides the stone industry, which was undoubtedly Perigordian, bone implements were found which seem to have belonged to a Magdalenian culture, as Movius noted in his original report. Furthermore, five radiocarbon dates imply the Magdalenian era. This would make it appear that the art of the late Perigordian and early Magdalenian cultures were more closely allied than had been imagined. From the stylistic point of view the La Colombière pebble fits well into a Perigordian sequence and was probably used for ritual purposes, being afterwards, as Movius asserts, deliberately broken.

"It is probable that there was some definite reason for superimposing so many animals on a single pebble, and it is felt that the only plausible explanation is to regard the object as having had importance in connection with certain magicoreligious rites associated with the chase. . . . It was the medium by which it was possible to commune directly with the spirits of the animal world. . . . And having served its purpose in connection with certain particular rites with the hunt, it was ceremoniously 'killed' as in the case of many similar objects found in other sites of the same age in western Europe" (p. 133).

334

The stone is covered on both sides with engravings of animals: horse, reindeer, ibexes, rhinoceros, all superimposed, the lines sometimes crossing over one another.

Only a horse, whose bold outline dominates one side, comes out strongly.

This is a heavily built pony with a bold and firmly engraved outline. Movius describes it as "an extremely naturalistic male horse, mane and ladder pattern extending down the back. . . . The facial details are clearly indicated, the forehead is slightly bulging" (p. 124).

The head no longer tapers into a triangle as in the middle Aurignacian horse of Pair-non-Pair. The muzzle is strongly emphasized, the eye deeply incised. A deeper cut separates the head from the muzzle: "The significance of the transverse line across the muzzle is unknown" (p. 124). Just as in the case of the horse from Hornos de la Peña, this line indicates the separation of the hairy cheeks of the horse from its smooth, hairless muzzle. In Magdalenian times this transverse line became a routine detail of numerous bone engravings.

All the animals upon the pebble of La Colombière stand at rest. There is no trace of interest in depicting movement, but there is an obvious determination to master the delineation of the outline in one smooth, continuous flowing line. The legs and hooves are depicted with care. The lateness of the period can be noted by an increased interest in the treatment of the surface of the body: the hair of the mane and the detail of the heads.

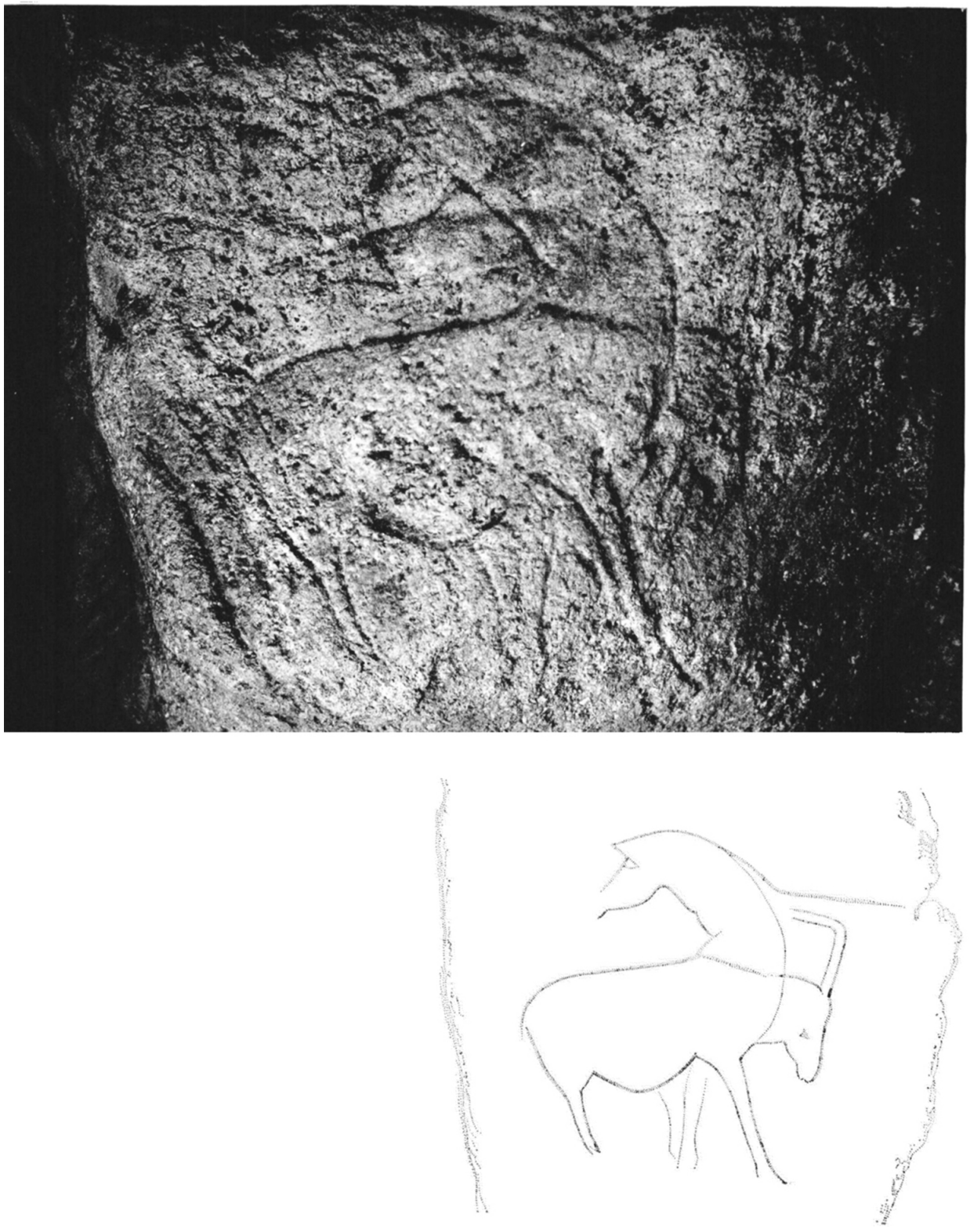
A horse from Hornos de la Peña

260 col

A narrow rock niche in the so-called "Diverticule Breuil" of the cavern of Hornos de la Peña (Santander) contains three figures: a horse, a snake, and a bovine head whose intensity comes out in the color plate.

305

Although there is no question of a local connection with the pebble from La Colombière, certain similar elements of a formal or structural nature exist which throw some light on the end of the Aurignacian-Perigordian era. The horse's head, in spite of its great economy of line, is most striking since all emphasis is concentrated upon it. The quivering muzzle is most sensitively expressed, and so are the sharply pricked ears, the firm, deeply incised jaw lines, and the sharp juncture with the neck line. "The fine lines denote the beard, and two strokes, which Piette took to be a bridle around the muzzle, represents the division of the hairy face from the smooth muzzle" (Alcalde del Rio, Breuil, and Sierra, 1911, p. 96). This is a sign of the structure of the animal. It is the same deep transverse line as in the horse from La Colombiere, and its meaning was set down clearly by Breuil as early as 1911.

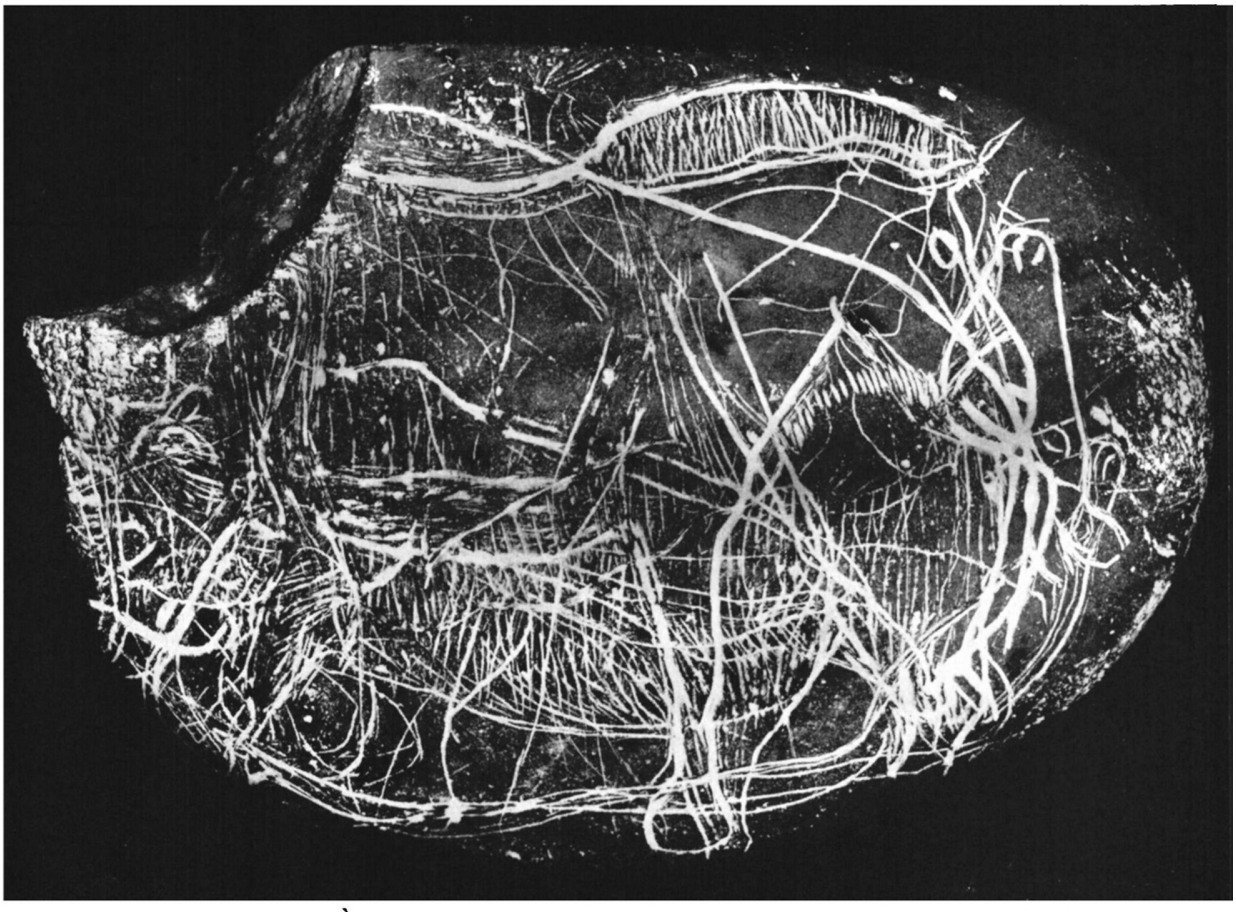


211. PAIR-NON-PAIR: *Animal with two heads, of horse and of ibex, formerly called the "Agnus Dei." With drawing*

166

In other respects the Abbé dealt harshly with this horse: "The proportions of the head are also faulty, and its muzzle is exaggeratedly large" (p. 96). But this is not a horse

which can be pressed into a naturalistic mold. Its vigorously developed head and the casual treatment of the body give almost the impression of a ghost horse. It was Breuil himself who proposed an interpretation of this sort for an engraving of a small horse on a *bâton de commandement* which omitted part of the body. Whether the differences between the La Colombière pebble and the engraving in Hornos de la Peña are due to differences in artistic ability or to a different stage of development cannot be determined. Today Breuil terms the horse from Hornos de la Peña "the finest Perigordian horse" (1952, p. 358). Like the pebble from La Colombière, it belongs to the final stage of the Aurignacian-Perigordian period, and it can be easily understood how, in 1911, Breuil assigned it to the succeeding Solutrean era. The artistic transitions between these two great periods are constantly fluctuating.



212. LA COLOMBIÈRE (*Ain*): *Pebble with superimposed engravings of a horse and other animals*

The bison from La Grèze

320, after 382

In the little cavern of La Grèze (Dordogne), a few hundred meters from Cap Blanc and its frieze of horses, a bison is engraved (60 cm.) . It is one of the most artistic products of the end of the Perigordian age. The individualized and assured mastery of the outline,

sought after for long ages, is here achieved. The fact that only two legs are depicted is of no consequence. What really matters is the fineness and tautness of the outline. The line of the back is followed through to the short tail. The curving line of the belly, sensitively connected with the foreleg, is especially delicate. The relief effect produced by the deep furrows outlining the head gives a hint of an important later principle. There is here the germ of modeling in relief by a hollowing out of the rock around the head, thereby inducing a plastic effect of light and shade. What is here barely perceptible will become the principle of the Solutrean reliefs, and will reach its perfection in the Magdalenian frieze of horses at Cap Blanc. It will be used also in the sunken reliefs of Egypt.

THE MAGDALENIAN ERA

All the knowledge and experience of primeval art is crystallized in the Magdalenian era and developed to an almost inconceivable degree of diversity.

The length of this period, according to estimates, ranges from fifteen to twenty millenniums. It is believed to have come to an end around 10,000 to 8,000 B.C. Of one thing there is no doubt at all: the Magdalenian era marked the culmination of primeval art. It holds an exceptional position in the development of art on other grounds: we know no other art of so-called primitive peoples which even approached the refinement or variety of its means of expression. One must turn to the Japanese brush drawings of the seventeenth or eighteenth century to find movement depicted with a similar economy of line.

The Aurignacian technique of capturing an animal's form by means of its outline and only its outline is almost inevitable; it appears in every culture. In this respect Aurignacian art was worldwide, covering the whole territory occupied by prehistoric peoples.

Magdalenian art, as it was developed in western Europe, was not worldwide. It is of little import that the Magdalenian people themselves had arrived from the east: the development of their art occurred in western Europe, and in a small region of western Europe, encompassing southwestern France and northwestern Spain, wherefore it is often known as Franco-Cantabrian art. Magdalenian art had had to undergo a long period of apprenticeship before acquiring the power to rise to such a high level.

right

At the start it was subordinate to the earlier Solutrean and Perigordian periods. Breuil divides the Magdalenian era into six phases distinguished by different types of work tools. The first three phases comprise the early Magdalenian (*Magdalénien inférieur* or *ancien*), the formative period. The middle and the late Magdalenian (*Magdalénien typique*) fall into the last three phases, which encompass the actual culmination of primeval art. Phases IV to VI are named after different forms of harpoons.

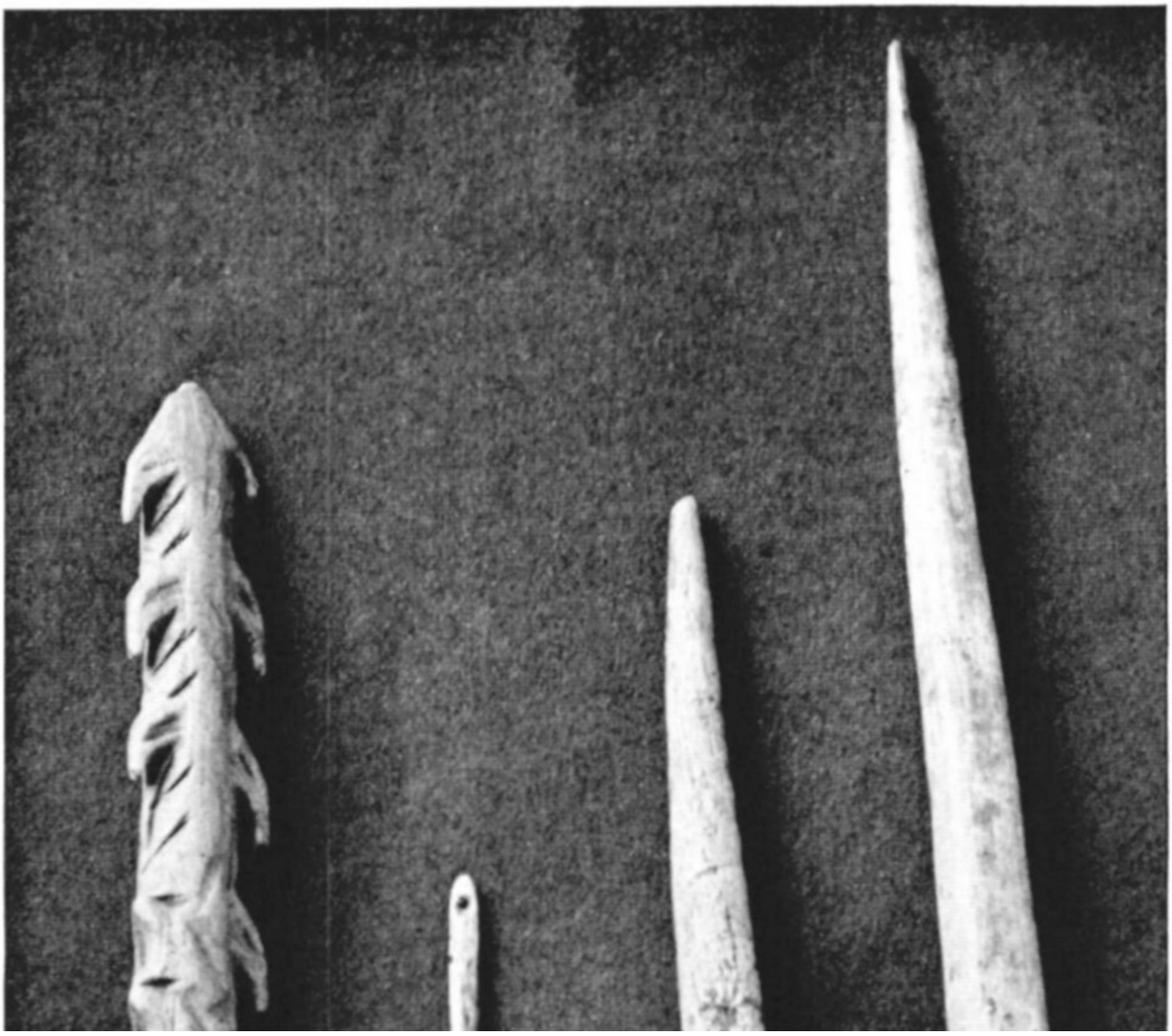
The high Magdalenian (phase IV) produced a remarkably large number of small objects, or home art (*art mobilier*), as well as a number of large sculptures. The greatest proportion of naturalistic art is also found at this time. A tendency toward greater abstractionism appeared in the late Magdalenian, without usurping the place of lifelike representations. This tendency developed into completely abstract symbolic

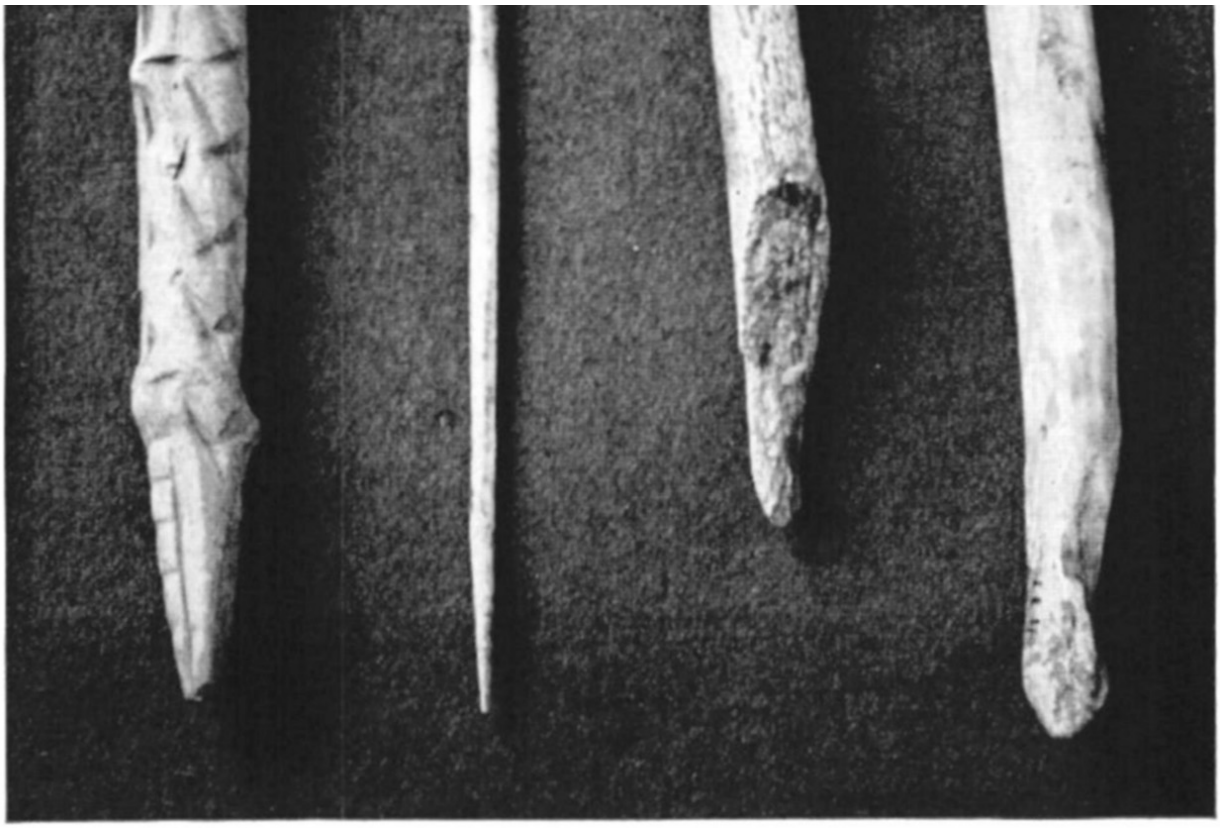
representations toward the end of the Magdalenian era, without ever descending into decadence, in the nineteenth-century sense of the word.

The Magdalenian people found, on their arrival, the countless cave paintings of former long epochs. The constancy — the continuity — which was maintained throughout prehistory remained unbroken by them. Frequently they placed their work upon the same sites that the Aurignacians and Perigordians had selected before them. Consequently they experienced the stimulus of the Solutrean sculptural reliefs, which to some extent paralleled the early Magdalenian period. These were all auspicious omens. Their starting point was already on a high level. Its threshold was based upon a long tradition which reached far back to the beginnings of art.

The unprecedented expansion of the means of expression in the Magdalenian era, combined as it was with extremely harsh conditions of life, presents one of the most hopeful instances of the inner nature of mankind.

The division of Magdalenian art according to the techniques of engraving, sculpture, and painting may appear highly artificial, since often two or more means were employed simultaneously to achieve the desired end. This method has, however, been attempted in order to gain a keener insight into each of the different techniques.





213. NORTHERN SPAIN: *hate Magdalenian bone implements: double-barbed harpoon, pierced needle, and punches*

THE ENGRAVING OF SMALL OBJECTS: *ART MOBILIER*

In the hands of Magdalenian man everything is brought to life. The high Magdalenian period had full mastery over expression on both the largest and the smallest scale. Indeed, it is difficult to decide which scale was superior.

163

The wealth of its *art mobilier* is boundless. Objects which, in the Aurignacian period, were simple, undecorated, ritual, such as the *bâtons de commandement*, became instruments for a highly developed symbolic language expressed within the least compass. The large number of such pieces discovered might lead one to speak almost of a talent for depicting symbolic narrative, a rare talent at any time. Little of the Magdalenian work has yet been deciphered, but even this has given us an unexpected insight into the language of symbols and its systemization. Its continuity sometimes extends beyond the bounds of prehistory and aids in understanding later representations, e.g., certain Egyptian hieroglyphs.

337

Other ritual objects, such as spear-throwers (*propulseurs*), cylindrical and half-rounded staves, and thin pieces of bone carved in silhouette (*contours découpés*), were

similarly engraved. Many materials were used, but bone was most favored by the Magdalenians. This appears in the forms of their various types of harpoon and in their fine bone needles, both masterpieces of craftsmanship. The Magdalenians had a special liking for anything rounded, sculptural in form. They sought the difficult. This spurred the imagination. They selected rounded bones and antlers — even the teeth of the mammoth — to adorn with their pictured symbols. Engravings upon stone also exist, as in the Perigordian era, but the engraved lines of the late Magdalenian period become so fine and so subtle that they elude the eye of the camera. A hint sufficed to convey the whole.

199

Because of the manner in which they were represented as well as their small size, Magdalenian engravings are often difficult for us to recognize. It is only after they have been enlarged and unfolded onto a plane surface that they become legible to our rationally trained eyes. The composition sometimes extends so far round the surface of a staff that, as upon a beautifully carved bone fragment from Lorthet (Hautes-Pyrénées), with engravings of reindeer, salmon, and vulva symbols that first attracted the attention of Hentze, the antlers and feet of the reindeer almost overlap. Primitive man did not need to "unfold" these drawings mentally in order to comprehend them: the Eskimo of today are testimony to this. This method of representation was at one with the prehistoric conception of space, so that the encircling engravings have also an inner significance.

341, 72, 73

The purpose of *art mobilier* was that of all primeval art: to release the predestined animal forms latent in the material and to perfect them. The purpose was the same whether the object was a bold rock painting or a delicate *bâton de commandement* or *propulseur*. The terminal points of these allowed play for the sculptural imagination: animals leaping upward, in full flight, about to charge, or locked together in combat. Three accidental excrescences upon a reindeer antler provided a sufficient starting point for the full sculptural rendering of three horses' heads (one with the skin removed) at the end of a *propulseur* from Le Mas d'Azil (Ariège), now in the museum at St-Germain-en-Laye. Similarly, a bison with back-turned head and a beast of prey (hyena?) were formed from pieces of bone and ivory (La Madeleine, Dordogne).

ON THE CHRONOLOGY OF THE MAGDALENIAN ERA

Treatment of the head as a possible clue

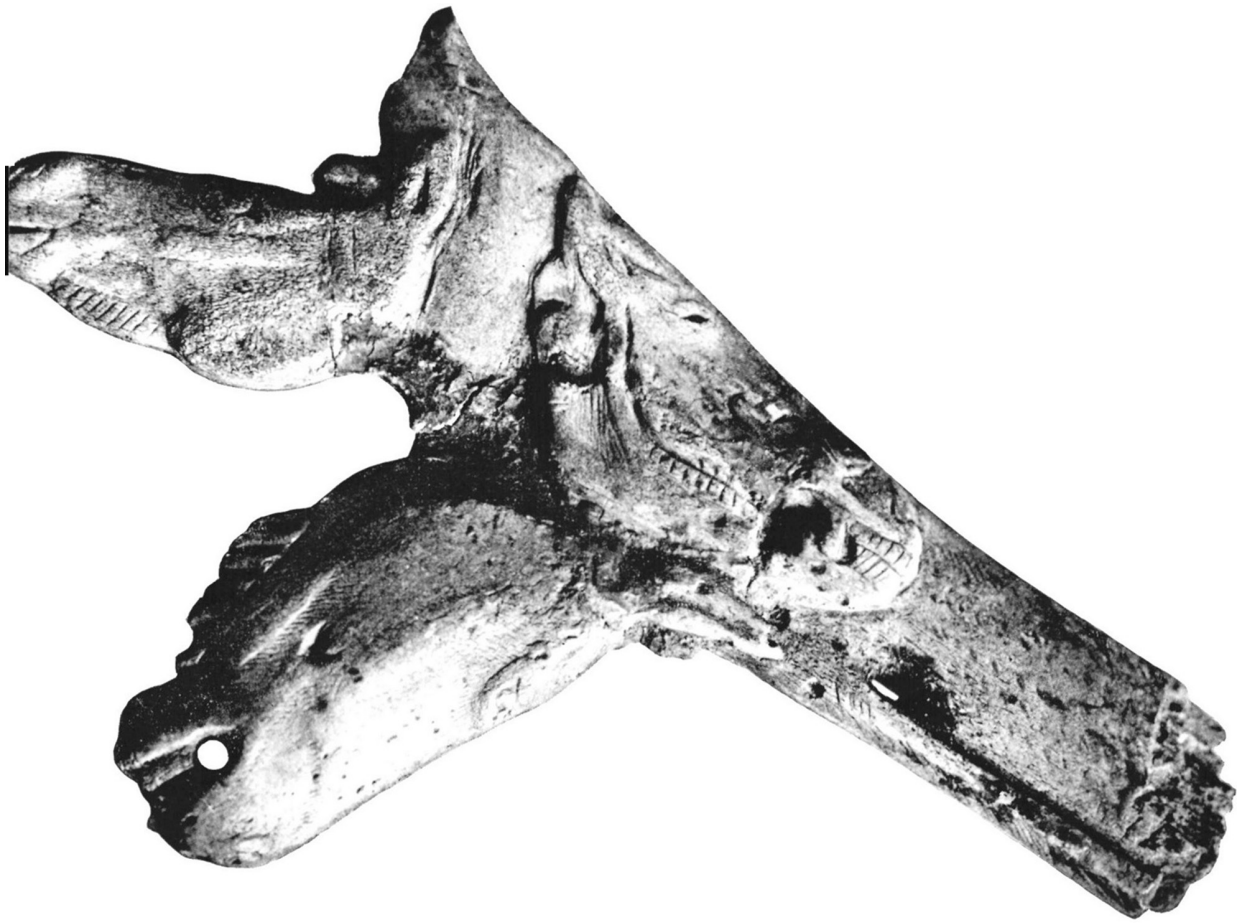
201

Whatever reference we have made to *art mobilier* has concerned the content rather than the quality of the figures depicted upon it. It is fascinating how the most complex ideas were expressed within the smallest space, and how much insight we can get into a superabundant wealth of symbols. These were expressed by a combination of lifelike animal forms and highly abstract signs, e.g., the bone staff from La Madeleine (Dordogne) which shows a naturalistic bear's head and abstract sexual symbols. A study of the treatment of these representations enables us to trace the gradual passage of the form of an animal from naturalism to complete abstraction in the late Magdalenian period.

In addition, one particular type of *art mobilier*, the *formes découpées* (Hat, silhouetted reliefs carved from pieces of bone), presents a starting point for determining a chronology of the middle Magdalenian period.

214. LES TROIS FRÈRES (*Ariège*): *Horse head, forme découpée, bone*

The strata in which the most delicately executed horse's heads appeared belong almost exclusively to Magdalenian IV; that is to say, they fall within the period of high achievement. It was only then that the Magdalenians had attained sufficient mastery of the means of artistic expression to give each head an outspoken individuality. This occurred at a time when the shaping of the body within the outline had become fully elaborated, but it is noticeable that particular care was taken in the treatment of the animal's head. It seems probable that this was due to the demands of ritual rather than to artistic volition, particularly when one considers the bewildering contrast between representations of animal and of human faces.



215. LE MAS D'AZIL (*Ariège*): *Three horse heads, facing in different directions, upon a propulseur. The right one shows a flayed head, revealing the skull*

287, 340

Various reasons can be put forward for this emphasis upon the head, as for instance the tradition (running through the whole of prehistory) that the head, the essential part of an animal, possessed a special power. This can be seen again and again, in pieces ranging from the Mousterian bear skulls of the Drachenloch to a Magdalenian engraved bone depicting the burial of a bison. The same cult reappears in *the formes découpées*, which consist chiefly of finely carved horses' heads in low relief.

after 382, 391

The horse seems to have been especially revered during the middle Magdalenian period, as in the sanctuary of Cap Blanc (Dordogne), where the treatment of the horses undoubtedly reflects a ritual attitude. Here too particular care was expended on the heads. This comes out even more strongly in the beautiful head of a horse from Commarque (Dordogne), whose body was only roughly sketched in.

344, 340, 344, 341

This same vigorous power of expression is also displayed on a small scale in the *formes découpées*. There is an astounding variety in the modeling of these intentionally

fragmentary objects. Some horse heads are reminiscent of early Greek reliefs: e.g., one, from Le Mas d'Azil, made from a reindeer antler, with large eyes and open mouth (5.5 cm.). Then there is a beautifully peaceful head from Les Trois Frères in the Comte Bégouën's collection, and a grotesque head from Laugerie Basse, its elongated form arising from the shape of the tongue bone from which it was carved. Finally there are heads with the skin flayed from their muscles, whose meaning is hidden from us (Piette, 1907, fig. 55). All clearly stem from the period when interest was concentrated upon the most varied means of depicting the characteristic features of an animal's form within its enclosing outline.

Since these heads vanish with the end of the Magdalenian IV, they provide a clue to the special interest of this period in the treatment of the body surface. There is no means of estimating the duration of this period of high Magdalenian art — Magdalenian IV — but, judging from the numerous works of art that depict this characteristic, it must have been long.

255 col

Subsequently, interest in this special kind of accentuation gradually declined, though it did not vanish entirely, as can be seen in the late Magdalenian staff from El Pendo (Santander), with its beautiful heads. It was only the advance of abstraction that caused it finally to disappear altogether.

345, 70

Certain instances of the accentuation of the head at the expense of the treatment of the rest of the body can lead us to a more exact limitation of this period. Within a hidden rock niche, three meters above the ground, in the cavern of Font-de-Gaume (Dordogne), a horse with a most expressive head is engraved. The body is depicted in a most primitive manner, its legs indicated by two lines crossing over the other much like the Aurignacian animals in the cavern of Ebbou. The contrast between the treatment of the head and the treatment of the body cannot be accidental.

347

A similar instance occurs in the cavern of Les Trois Frères. In one of the groups engraved beneath the sorcerer, there are two horses whose carefully elaborated heads are attached to bodies which, with obvious intention, are quite wooden. Both in Font-de-Gaume and here, fully modeled heads, like *formes découpées*, are placed upon neglected bodies: Magdalenian IV.

This neglect of the body is certainly not due to any lack of skill. The reason for the accentuation of the head has not been determined. In the caverns of both Font-de-Gaume and Les Trois Frères, these figures were placed in specially favored positions.

SCULPTURE

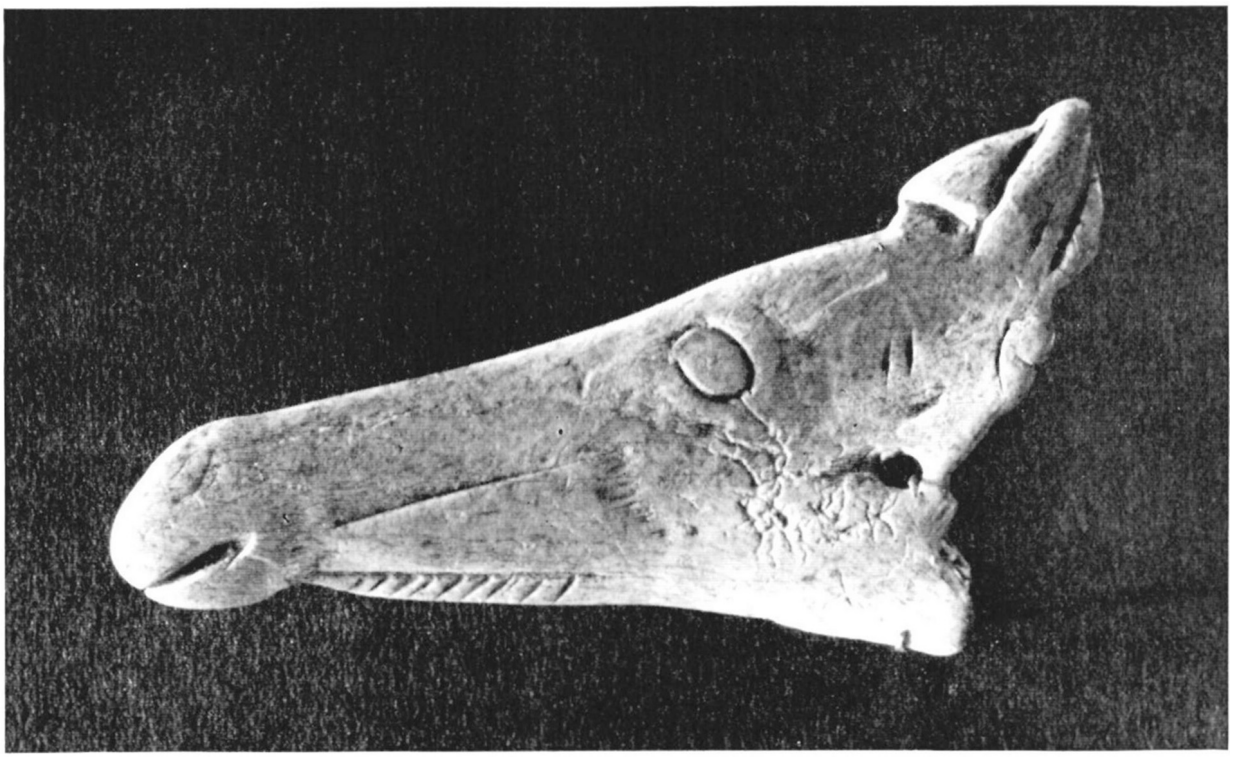
We know of only few large-scale reliefs from the Magdalenian era. These few are, however, of very high quality.

497

The large relief of three female figures at Angles-sur-Anglin (Vienne) was brought to light in 1948, beneath a late Magdalenian stratum (Magdalenian VI), after long and toilsome labor by Dorothy Garrod, Susanne de Saint-Mathurin, and Germaine Martin (Saint-Mathurin and Garrod, 1951) . At the foot of the relief was a layer of early Magdalenian (Magdalenian III). This accorded with the forms of the female bodies: hard outlines and lack of any surface modeling. The same stratum yielded up a beautiful ibex head (Graziosi, pl. 161) as well as a very rare polychrome head of a man. His blunted features are strongly reminiscent of the engraved stones from the cavern of La Marche (Vienne), which were also found in a stratum of Magdalenian III.

482

The recumbent female figures from La Magdeleine (Tarn) represent a higher stage of development. They are replete with the sculptural delicacy of high Magdalenian art. The body is beckoned out from the rock in a gentle curve. The harsh outlines of the females at Angles-sur-Anglin have vanished. The same undulating curves appear in the low relief of a horse, near the entrance to this cavern, which, as Breuil has pointed out, belongs to the same period as the female figures. These reliefs stem from the high Magdalenian (Magdalenian IV) and were made in the middle stages of this period or even later.



216. LAUGERIE BASSE (*Dordogne*): *Horse head*, *contour découpé*, *tongue bone*

217. LE MAS D'AZIL: *Horse head, forme découpée*, *reindeer antler*

218. FONT-DE-GAUME (*Dordogne*): *Forepart of horse engraved in a rock niche*

after 382, 391

Nothing else in the Magdalenian era approaches the size or the sculptural vigor of the frieze of horses beneath a rock overhang at Cap Blanc (Dordogne). The modeling of the animals' bodies is not shown by hatched lines, as on the *art mobilier* engravings, but by

a bold molding of the rock surface: a further development of a tradition started in the Aurignacian period. At times the character of the pelt and mane are also indicated. The expressive qualities of the *formes découpées* can be recognized in the treatment of the heads. This is work of the high Magdalenian period (Magdalenian IV); likewise the even more sensitively modeled head of a horse from Commarque (Dordogne).

Drawing for fig. 219

219. LES TROIS FRÈRES: *Two engraved horses, with detailed heads*

PAINTING

406 ff

As yet it is difficult to write about the paintings from the first half of the Magdalenian era. The few examples attributed to this period are insufficient. Probably it will become possible to gain some real insight into its nature only after the early Magdalenian work in the cavern of Lascaux has been clearly distinguished from work of the preceding Solutrean and Perigordian periods.

419 ff

The culmination of all prehistoric painting — the ceiling of Altamira — stands out as an achievement without precedent.

MODULATION OF THE OUTLINE

350

A main concern of the Magdalenian era was to bring more ease, elegance, and variety to the heavy outlines of the Aurignacian-Perigordian period: in short, to impart more vitality. Once the development has proceeded far enough, the slightest accentuation of outline will suffice to impart a new intensity to the form. One can instance the articulation of the underbelly of the bison at Pech-Merle, poised to charge. Its dynamism is the result of a small nick at the decisive point. Magdalenian art is full of just such unexpected and instinctive refinements.

The Magdalenian era achieved full mastery over the outline, which had been the object of endeavor during long ages. It now became possible to pursue the possibilities of varying the extended outlines of the Aurignacian-Perigordian period and thus to bring more intensity to the total form. This was done by modeling it with curves or even with sharp angles, if this would bring out the form desired.

The charging bison of Pech-Merle

350

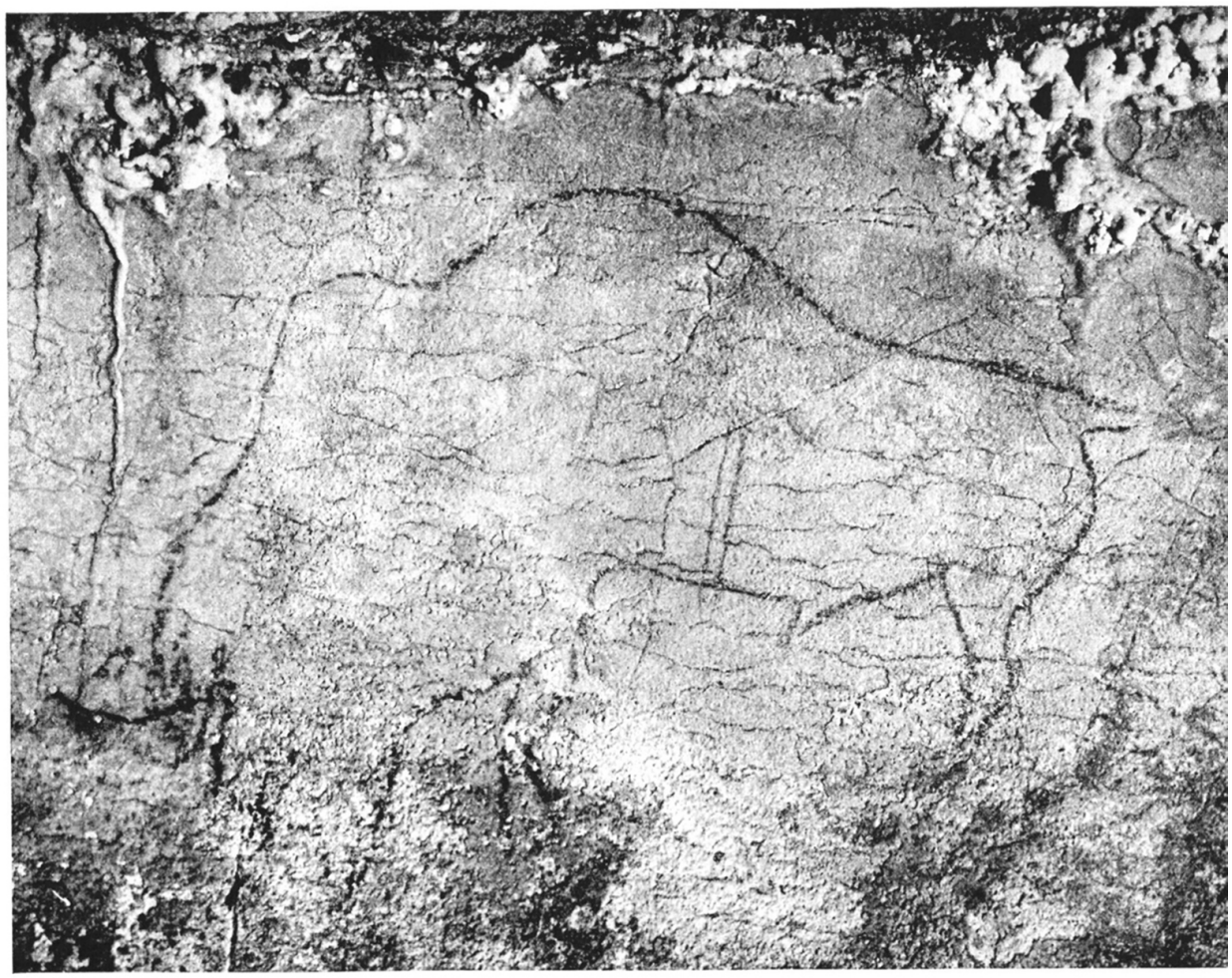
From a multitude of possible examples we have here selected a bison about to charge, with head bent low. It is not far from two Aurignacian horses in the cavern of Pech-Merle and measures from head to tail only 65 cm. “It is painted with a black outline in a fold of the rock wall, only a few centimeters above the ground. Its attitude . . . gives a particularly vivid impression of life” (Lemozi, 1929, p. 107).

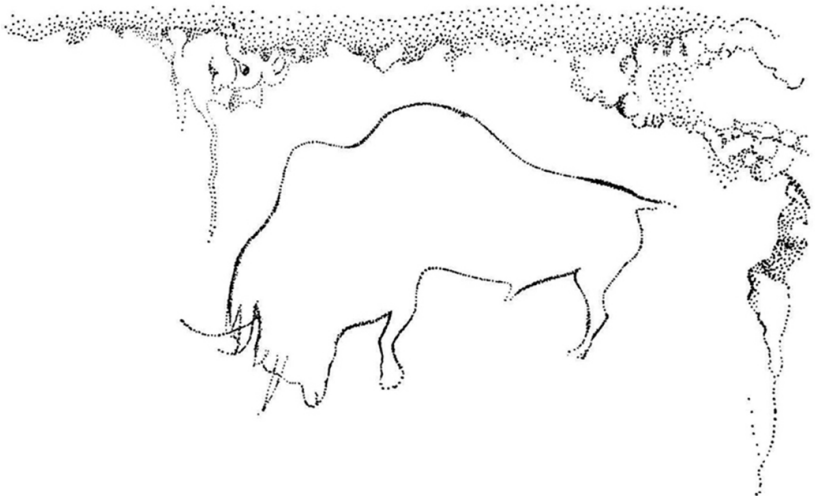
It is most impressive how the means by which the bison has been expressed have been reduced to the bare essentials. All strength is concentrated upon the outline, which runs around the body with electric force. What does it matter if only a single foreleg and hind leg are depicted and if the surface of the body remains untouched? From the undifferentiated mass of his low-flung head the wave of his back curves up steeply and continues into his horizontally outstretched tail. His hindquarters blend into the line of

the hind leg. Sharp indentations bring out the essential aspects of the underbelly, and a single foreleg, raised and bent, is sufficient — together with the massivity of the great head — to imbue the aroused animal with vivid life.

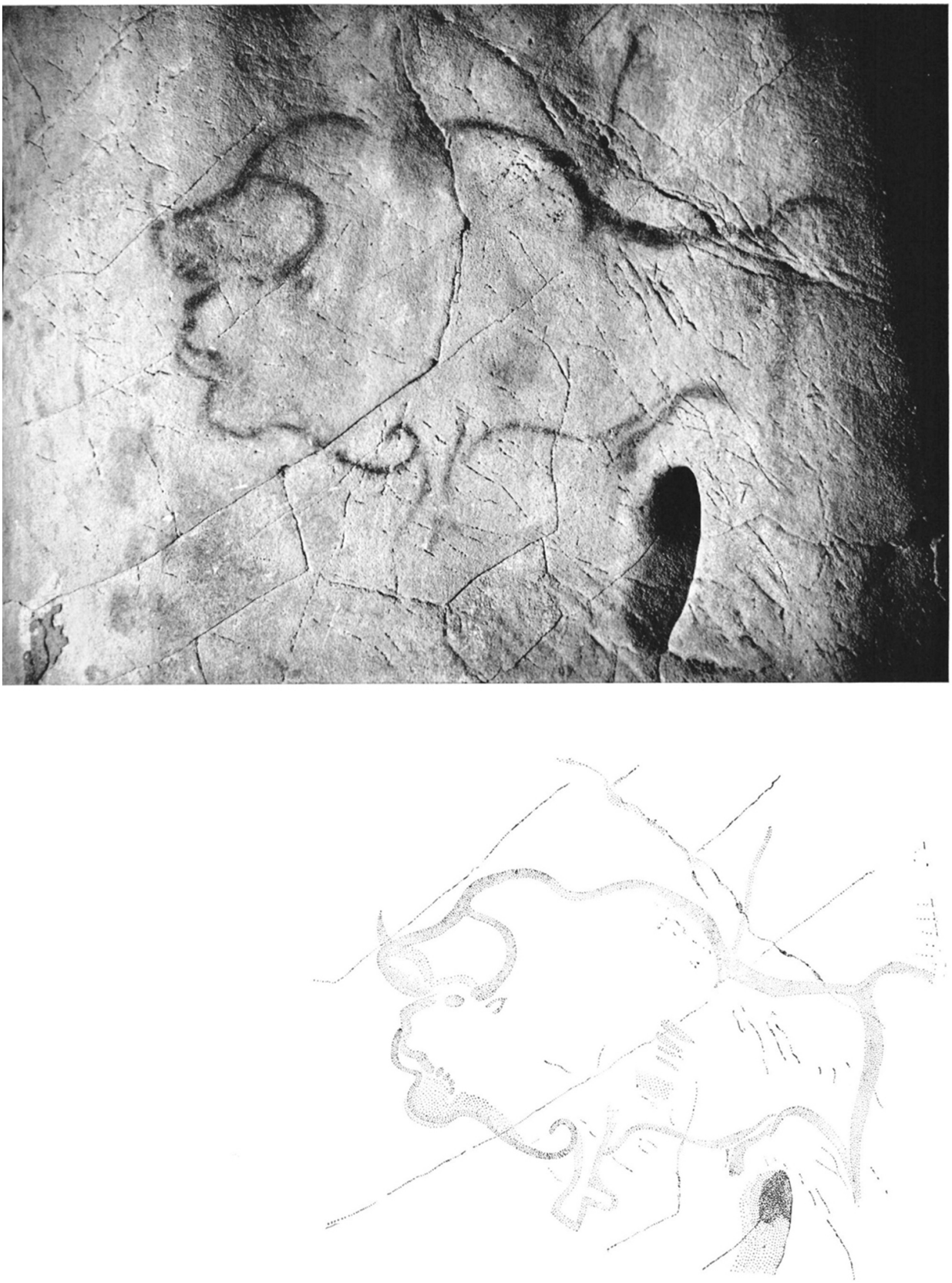
27

To present but a single foreleg and hind leg is not unusual in the Magdalenian era, and here it reinforces the strength of the total form. “The great simplicity of the outline,” writes Lemozi, “recalls Aurignacian drawings” (1929, p. 107). The charging gesture of the flexibly bent foreleg and the modulation of the total outline reveal the great competence of this phase of the Magdalenian era, which also includes the animals in the nearby Chapel of the Mammoths, though the outline of the charging bison is even more freely flowing than theirs. A long road was traveled from the abstract charging bison of Pech-Merle to this modulated figure.





220. PECH-MERLE (*Lot*): *Painted and incised Magdalenian bison about to charge. With drawing*



221. LA PASIEGA (*Santander*); *Painted bison, the outline treated with great freedom verging on abstraction. With drawing*

In late Magdalenian times, mastery of the outline became so conscious that it was almost turned to the development of ornamental forms, as in the bison of La Pasiega, an obvious trend toward abstraction, peculiar to the late Magdalenian.

354

The handling of the outline can also give certain hints as to the period of the engravings from the little cavern of Le Gabillou (Dordogne). Here we can only touch on the treatment of a delicate little horse, so replete with movement. Almost no surface modeling. Only its mane, fluttering in the breeze. The form of the outline is no longer enclosed, as in the bison of Pech-Merle, nor is it ornamentally voluted like the bison of La Pasiega. It points to a period in which breaks in the outline and yet the simultaneous incorporation of the body in the modeling had become a matter of course: this means between the middle and the late Magdalenian periods.

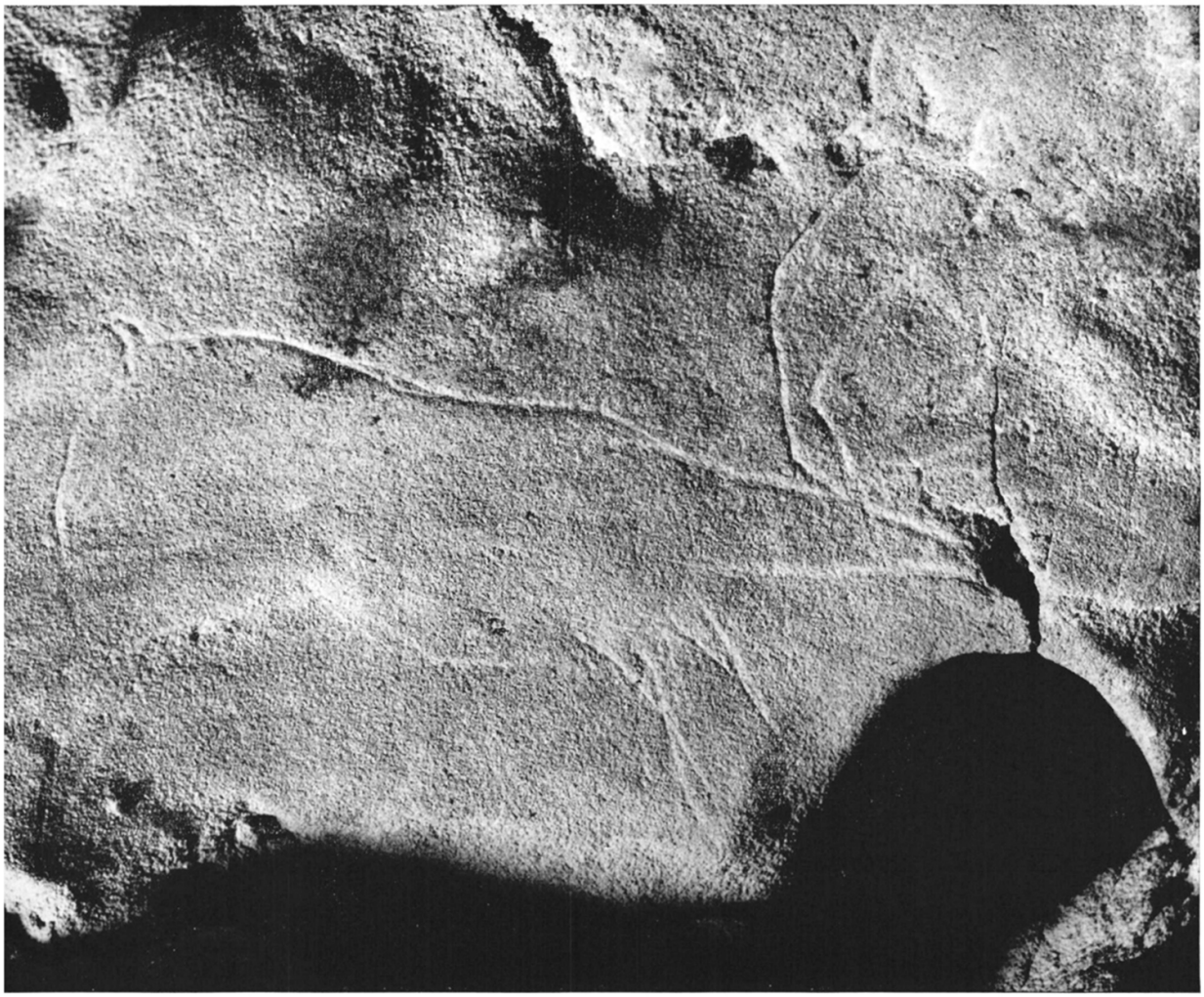
The engravings of Le Gabillou

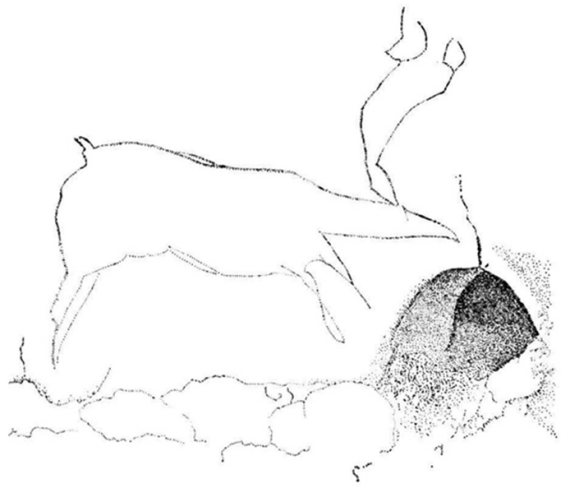
right

For sheer delicacy of engraving, the hair-fine outlines of animals cut into the soft limestone of the cavern of Le Gabillou are unsurpassed. With the utmost artistic economy and in the smallest space, we are here shown the power of Magdalenian man to create outlines as lively as they are allusive.

354

The small cavern of Le Gabillou, discovered in 1941, is beneath a house, at the end of a wine cellar. It was inaccessible and almost completely filled up with clay until its present owner cleared it out with his own hands. Today, once more, it is just possible for two men to stand upright side by side and observe the many delicate engravings which are strewn over its low ceiling. The animals—horses, cattle, bison, reindeer, ibex, rabbits, even a small mammoth — seem to have been breathed upon the stone. As is so often the case in Magdalenian art, the horses have been executed with a particular grace. Among them appear what is probably a stallion following a mare: the mare is shown in lissome movement with her delicate head in profile, gently curving back line, and slender, merely suggested limbs. A few hair-fine strokes indicate the loose mane, others the thick pelt. This prehistoric engraving may be compared with those refined dry-point etchings of the seventeenth century, whose creators were able to achieve a similar vitality by using the finest of lines in the smallest possible format.





222. LE GABILLOU (*Dordogne*): *Finely engraved reindeer with outstretched forelegs* (*22 cm. long*). *With drawing*

223. LE GABILLOU: *One horse following another. With drawing*

224. LE GABILLOU: *Large bison* (*60 cm.*) *and small horse* (*25 cm.*). *With drawing*

355

Another group consists of a larger, probably earlier, bison (approx. 60 cm.) and a much smaller horse (25 cm.) shown in elastic motion. It is noticeable that part of the belly of

the bison is also incorporated in the outline of the small horse, which was engraved later.

It is as well not to assign these refined engravings to too early a period. The Aurignacian-Perigordian age is out of the question. These engravings speak the elegance of the Magdalenian era — and at not too early a period within it.

353

An elongated reindeer (22 cm.) is far simpler in outline, and earlier in time. Its raised forelegs indicate the onset of a leap through space.

497

In contrast to the fineness of these animal images, the cavern of Le Gabillou also possesses a deformed and distended anthropomorphic figure, which is reminiscent of the Magdalenian engravings from the cavern of La Marche.

As a whole, however, the superb eye-level engravings of Le Gabillou are among the choicest delights of primeval art: miniatures transferred to stone.

Drawing for fig. 225

MODULATION OF THE BODY SURFACE

266 col

Some modulation of the body surface by means of a structural emphasis on certain planes already appeared, even though fragmentarily, in the Aurignacian-Perigordian period. In the middle Magdalenian period (Magdalenian IV), structural treatment of the body surface became of the greatest importance. This could be achieved at its smallest scale, upon engraved bones, by a very few strokes. On larger scale, it was achieved by a variety of means. It is here that different techniques were often employed simultaneously, until the ultimate synthesis was attained in the recumbent bison of Altamira.

225. LES COMBARELLES (*Dordogne*): *Mammoth with two trunks, one flung up*

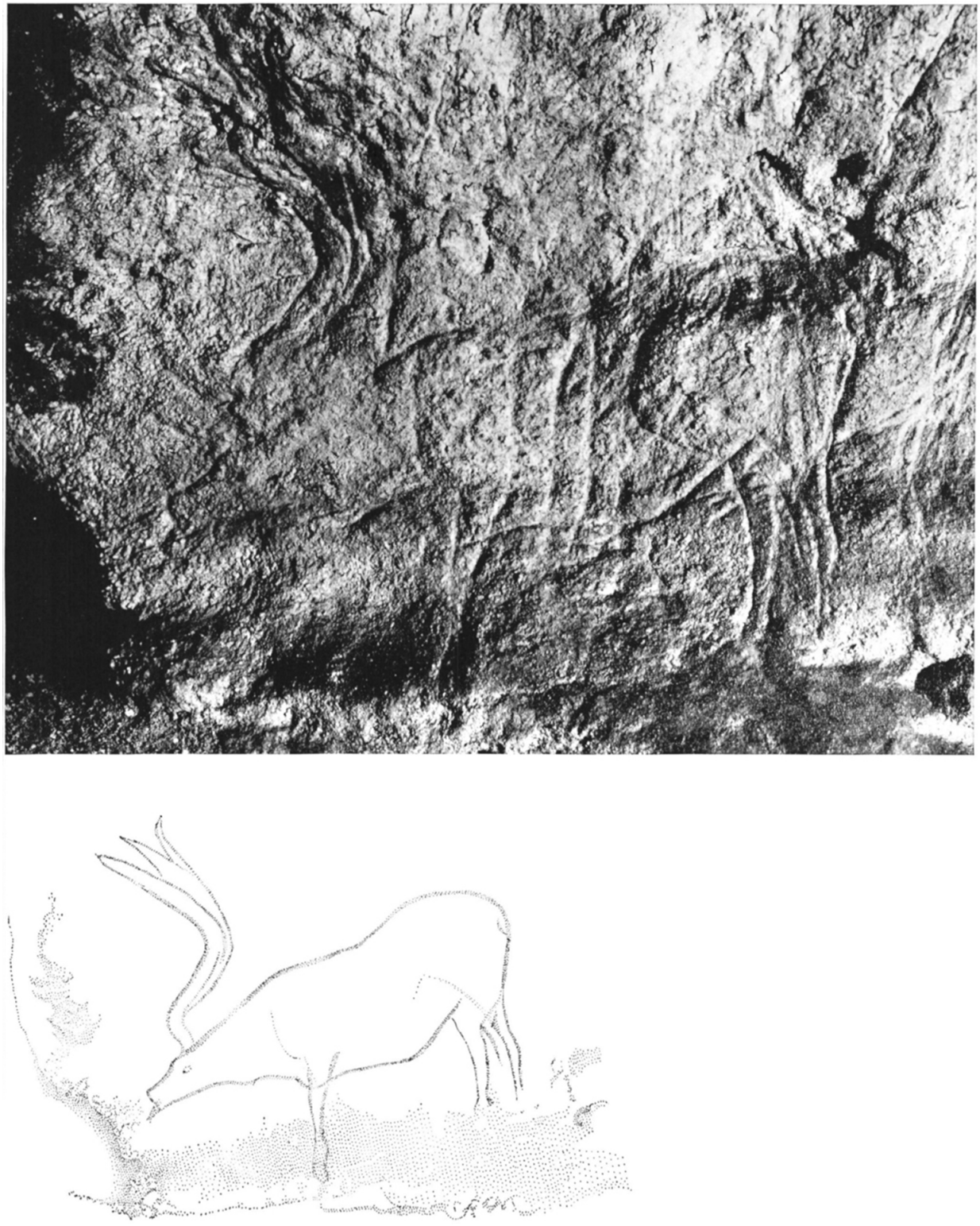
226. LES COMBARELLES: *Two animals, facing one another. With drawing*

227. LES COMBARELLES: *Head of the horse to the right*

The engravings of Les Combarelles

By far the richest find of engravings showing a structural treatment of the body surface is in the cavern of Les Combarelles (Dordogne), in the valley of the Vézère River not far from Les Eyzies. This could even be named the Cavern of the Engravings. It was one of the earliest caverns discovered (1901) . It winds its serpentine way nearly three hundred meters into the mountain. This sanctuary is hardly wider than a man with outstretched arms, and often scarcely man high. Yet the site must have been particularly highly regarded, otherwise its great wealth of engravings could hardly be explained.

228. LES COMBARELLES: *Lioness. With drawing*



229. LES COMBARELLES: *Reindeer with outstretched head. With drawing*

These engravings start only in the second part of the cavern. Animals of the most varied kind: reindeer, rhinoceros, lions, mammoths, bears, bison, horses. The horses are by far the most numerous: 116 in all. In addition there are about forty hybrid and ithyphallic human figurations. The almost terrifying crowding of large and small creatures juxtaposed and superimposed can be seen in Breuil's drawings in the great

work published under the patronage of the Prince of Monaco (Capitan, Breuil, Peyrony, 1924). Yet a less favorable place for making engravings can scarcely be imagined. The rock has as many furrows as the skin of an old elephant, and there are so many engravings superimposed that they can scarcely be deciphered.

All signs confirm Breuil's placing of its period: "The great majority of the works at Les Combarelles can be placed between the Old and the Middle Magdalenian periods" (1952, p. 101) . This means that we can here gain some insight into the often difficult-to-judge first half of the Magdalenian period, whereby the Middle Magdalenian can be brought much more strongly into focus. For this purpose a few particular figures have been selected.

357, **398**

Mammoth with two trunks, *one flung up:* The head and main trunk come out most clearly. The general outline remains partly buried in the scarred rock. Certainly this background played a part in this representation. But a comparison with the mammoth at Pech-Merle shows that we are here at an earlier stage of the Magdalenian era, indicated by the clumsy attachment of the feet.

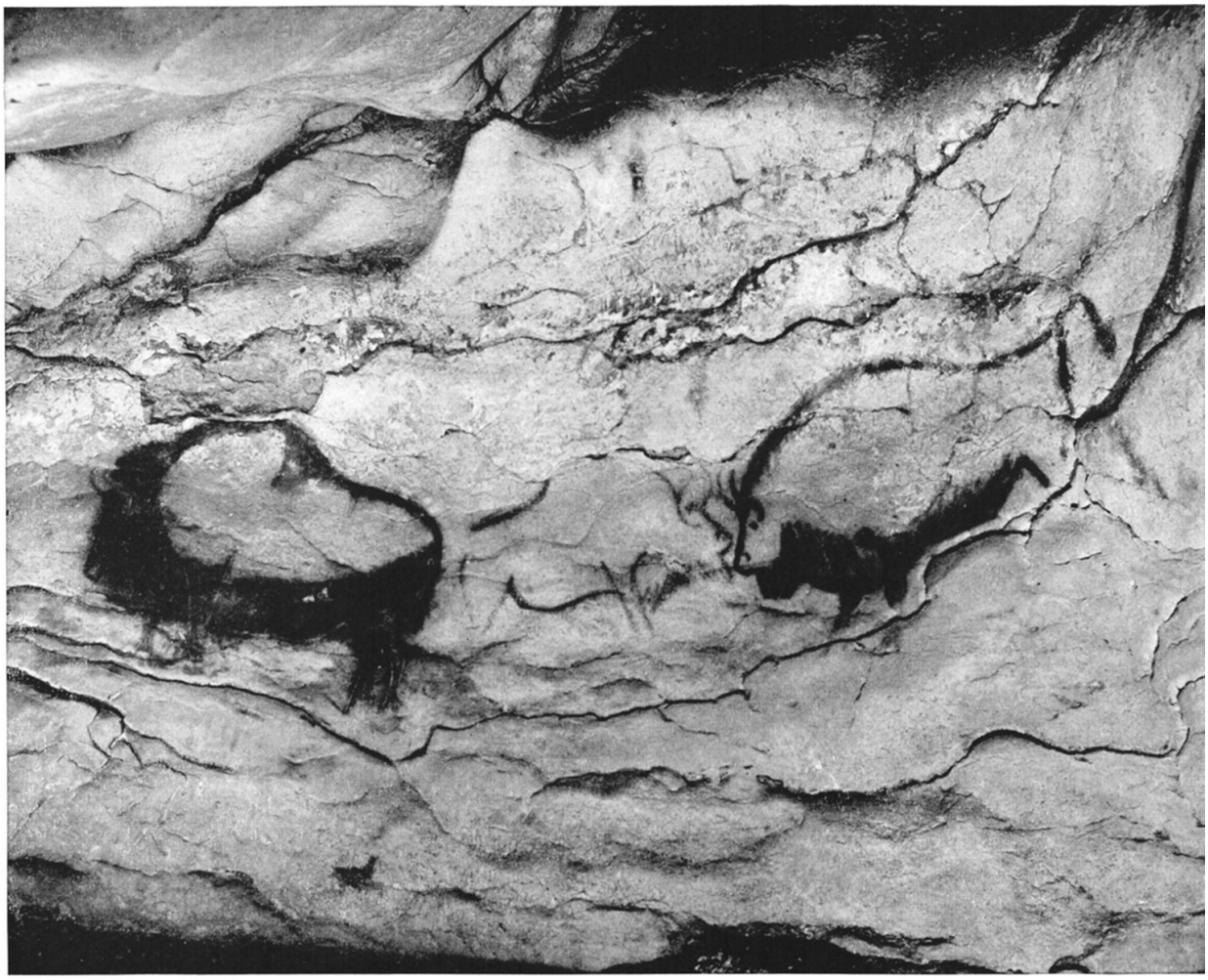
358, **359**

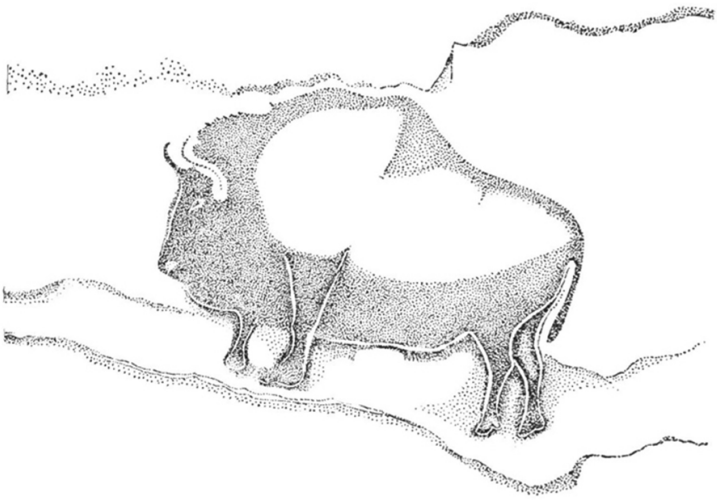
Horse confronting another animal: Here also one could not speak of a flowing outline. There is no real momentum in the line of the back. The deeply incised line of the neck and the way in which the legs are attached to the body reveal an early period of the Magdalenian era. Only the head shows traces of a more developed sensitivity.

360

The lioness: The lioness is following a lion, whose tail is just visible in the illustration. The treatment of this figure shows much greater assurance. The outline is already softer and more modulated, and less deeply incised into the rock. The forelegs are organically attached to the body and — what really matters — the artist has been able to handle the head in a fully expressive manner: a hint that we are here in the Middle Magdalenian period.

230. FONT-DE-GAUME (*Dordogne*): *Reindeer* (*the head has disappeared*) *and black bison, part of whose back is formed from the natural rock. With drawing*





231. LE PORTEL (*Ariège*): *Three bison in the Galerie Breuil, two partly painted black with engraved outlines. With drawing of large bison to left*

361

Reindeer with outstretched head: This reindeer is even further developed. Here one can already speak of a modulated outline from which the antlers leap up like flames.

From the tip of its muzzle to the root of its tail there is a complete mastery of the outline, and some slight modeling of the body is also attempted. The hind legs are fully elaborated and really form part of the body, in the manner familiar from countless bone engravings. The outline is delicately handled. All signs point to the Middle Magdalenian period (Magdalenian IV).

Two animals at Font-de-Gaume

363

This flexible handling of the outline comes out even more strongly in a reindeer from the cavern of Font-de-Gaume (Dordogne), which belongs to the same period. The creature has been half worn away, but the remaining portions, which are related to areas faintly toned in black, intimate the representation that Breuil has sought to convey in his famous reconstruction (1952, p. 83). The head of the reindeer has perished. A line running along the center of its body separates, in the simplest way, the dark and light portions of its hide.

Further modulation of the body surface was brought about by the introduction of color. The accentuation of entire surfaces by this means occurred frequently in the Aurignacian-Perigordian period, as in the pair of horses from Pech-Merle. This elementary use of color was refined and varied in the Magdalenian era, first by a simple delimitation of the dark and light areas of the hide.

A bison follows after the reindeer. The back, partly predetermined by the rock formation, is lightly emphasized by color, as are also its head and neck. But coloring is still very hesitatingly handled. Judging from the treatment of the outline and the setting of the legs, this group belongs to the Middle Magdalenian.

A group at Le Portel

left, 261 col

This pair of animals at Font-de-Gaume can be compared with another group from the Galerie Breuil in the cavern of Le Portel (Ariège). This group shows a later stage, when the use of monochromatic areas of color had been fully mastered. Three bison are represented, all upon different levels, following the rock ridges. Two stand face to face, one only depicted in outline, the other with its neck, belly, and legs emphasized by heavy black strokes. The most interesting is the advancing bison, with its squat, concentrated energy. A color illustration shows the imagination with which the color is handled. In the middle the naked rock is left untouched, and the surrounding color lends this area an abstract form; the body otherwise is enshrouded in deep blue-black. If one compares this complete mastery of the use of color with the group at Font-de-Gaume, the extent of the progress since the Middle Magdalenian (Magdalenian IV) again becomes apparent. The outline of this bison is engraved; the forelegs are shown

frontally, the fully detailed hind legs in profile. The engraving was done subsequent to the painting.

364

The attribution of these animals to the *Magdalénien ancien* can scarcely hold (Breuil, 1952, p. 228). They belong to the second half of the Magdalenian era, and to the later rather than the earlier period, like the animals in Niaux. The first bison, whose chest is emphasized by black paint, could well figure in the Salon Noir of the cavern of Niaux, but there was greater energy in the hand which drew it.

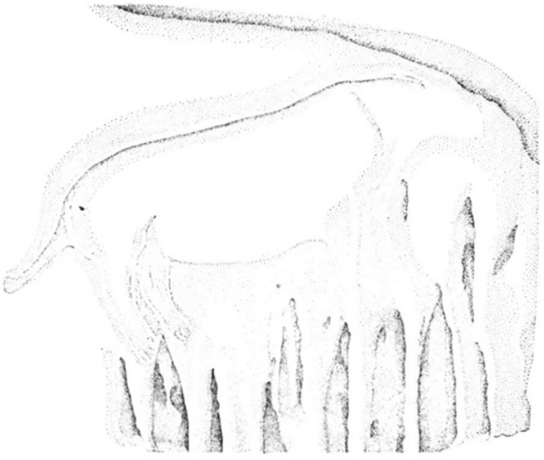
right

The horse pawing the ground (*le cheval qui piaffe*) is one of the most charming Magdalenian drawings. No color is used, but the boundaries of the color zones are indicated by strong black lines. Whether this work was left uncompleted or whether this was the intended effect is difficult to say. Head only partly preserved, taut outlines confining the well-rounded body, but everything replete with life: one can sense the pulsing blood. With a royal freedom, the artist casts aside all that he deems inessential to his ends.

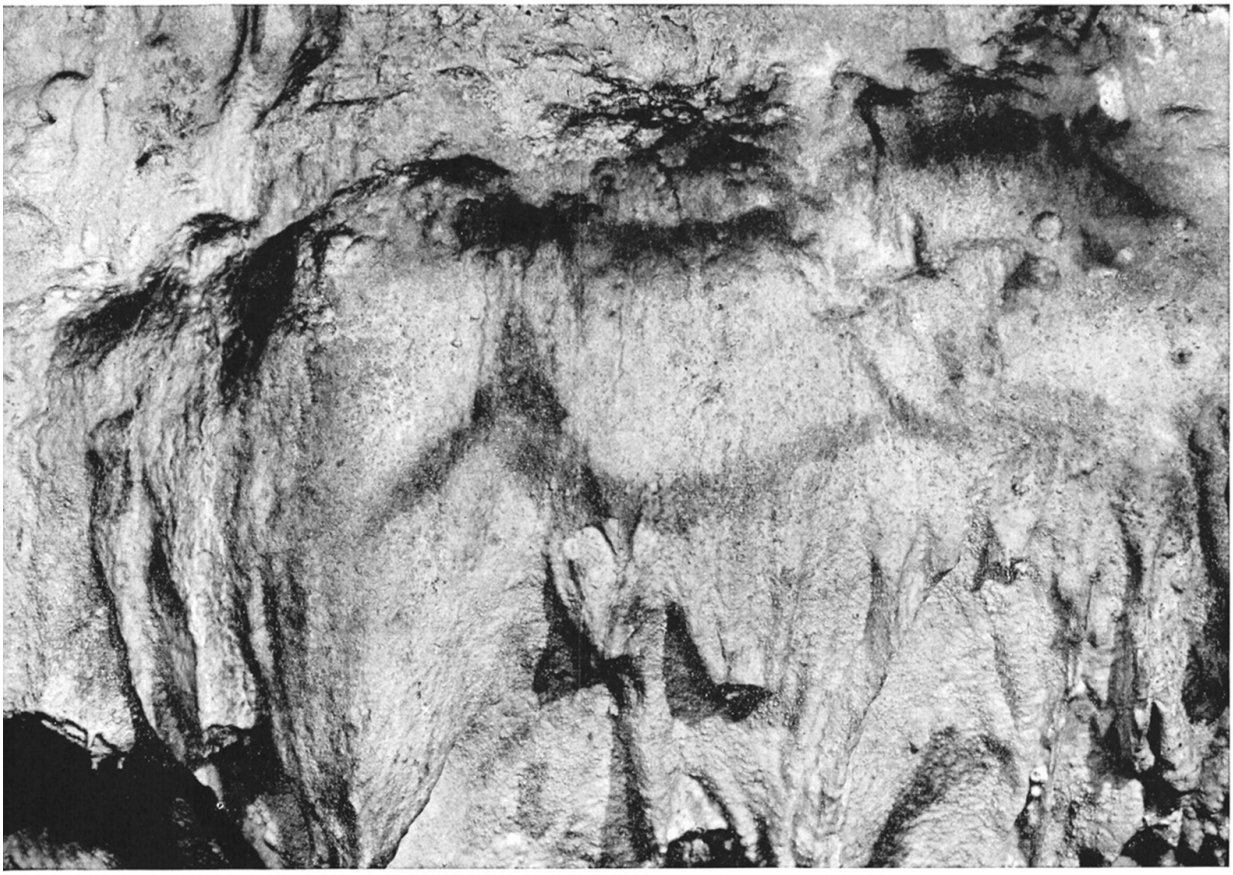
Despite whatever has been written, one cannot interpret Magdalenian man as a passionate naturalist and criticize his work in terms of the realism it achieves. He was a most exact observer, who simultaneously had the ability to transpose what he saw into artistic form. He moved, all unawares, onto another plane. Every part of the outline of this little horse is expressive, a perfect interplay of lines which never descends to ornamentation. It is of no importance that the ends of the crossed front legs do not appear or that only a single hind leg is shown.

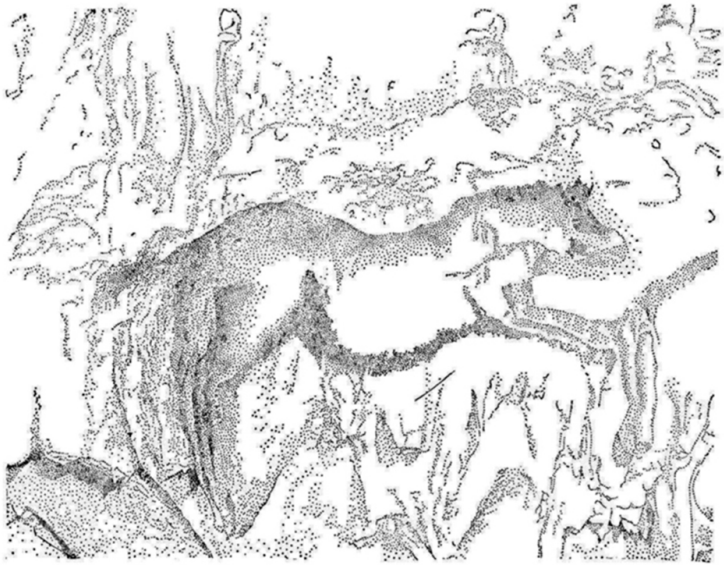
Internal lines delimit the various colors of the animal's pelt. But they also play another role: one line darts through the body at a sharp angle, leading resolutely through to the line of the foreleg, whose upper part is deliberately overstressed. If this line were eliminated, all sense of movement would disappear. All signs point to the high Magdalenian period, when such complete mastery had been attained over the means of expression that it was possible to give the impression of color without in fact using color.

232. LE PORTEL: *Painted horse pawing the ground*



233. LES TROIS FRÈRES (*Ariège*): *Lioness painted above stalactites. With drawing*





234. FONT-DE-GAUME: *Leaping horse, its hind legs and tail formed by the rock. With drawing*

ENGRAVING, SCULPTURE, AND STALAGMITES

368, **369**

Again and again it is most striking how the natural form of the rock provides a starting point for the outline of an animal. The folds in curtains of stalactites served the same purpose. We see a lioness from the cavern of Les Trois Frères and a leaping horse, probably pursuing a mare, from Font-de-Gaume. In the latter an attempt is made to give an impression of polychromy through the use of heavy black strokes penetrating the outline of the body. Both belong to the high Magdalenian period.

263 col, 531

The apparently vertically rising bison from El Castillo is almost entirely formed by the natural irregularities of a stalagmite. The vigorous modeling of his muscular body is indicated in color. The whole treatment shows that he belongs to the Altamira period of the Magdalenian era.

The age of sculpture is surveyed in the following section, since it passed without a break from the Solutrean into the Magdalenian era. The great compositions in line and in color are then considered, and, with them, the modeling of the body surface by the use of color.

THE AGE OF SCULPTURE

DIFFERENCES BETWEEN CLASSICAL AND PREHISTORIC RELIEFS

The age of sculpture, which in prehistory is identified with bold rock reliefs, encompasses the entire Solutrean period and even a part of the Magdalenian. Afterwards, vanquished by the upsurge of abstraction, the desire for boldly plastic representations lay dormant for long ages. It was awakened only at the beginning of the first high civilizations.

High reliefs — in which some details project strongly from the background — developed in fifth-century Greece and attained their Hellenic summit at the beginning of the second century B.C., in the colossal frieze of the altar of Zeus at the Acropolis of Pergamum, in Asia Minor. The altar of Pergamum, surmounted by the theater, stoas, and temples on different terraces, is the greatest effort of Hellenistic sculpture as well as the artistic zenith of the chief cultural center of Asia Minor. The figures on this frieze show clear signs of their origin from sculptures in the round. The drama of free movement and of the effects of light and shadow was transferred to the relief. This frieze achieves the greatest possible contrast to the sculptural friezes of prehistory.

The subject of the Pergamene frieze is also significant: a cruel battle between giants and gods, symbolizing the battle against the invading barbarians, won by the Greek rulers of Pergamum. The relief, more than six feet high and three hundred and thirty feet in total length, extends all around the altar. Its theme afforded a welcome occasion to create a number of scenes of tumultuous movement: diagonally crossed limbs, excited gestures, and wind-blown garments. All are basically sculptures in the round, seemingly reattached to the rock background from which they had been, as it were, severed long before. Feet and arms jut out over the base line of the frieze.

320

The high reliefs of prehistory are entirely different. They were not derived, like the Greek high reliefs, from sculpture in the round: on the contrary, rock walls and carved figures constitute an inseparable whole. One is born from the other. The recurring phenomenon of using existing natural rock shapes, of discerning an animal or a figure lurking within natural formations of the rock, led to sculptural consequences. One could stretch a yielding surface over these high reliefs and it would recover the plane of the original rock face. No part of the relief projected beyond this. Plasticity was not

achieved by hewing a form out from a block. Instead, deep curving planes were carved into the rock. The high reliefs of prehistoric times originated as a result of following through the lines and contours of the natural medium. Early traces of this procedure can be observed in an engraving of the head of a bison at La Grèze (Dordogne).

High reliefs of the Solutrean period

The beauty of the stone tools from the Solutrean period has never been surpassed. During this era interest tended to concentrate upon stone. The bone industries receded. The technique employed in making these stone implements was now based on indirect percussion, or pressure flaking, rather than on direct impact. Preparatory steps in this direction had been taken in the Mousterian period, and even in the Acheulean, but now they were carried much further. Flat, perfectly balanced tools of a surprising size were achieved. From their form these have been named willow-leaf and laurel-leaf points. This period of sophisticated tool manufacture coincided with the period of bold sculptural reliefs.

235. LA CHAIRE A CALVIN (*Charente*): *Head of mare to right in fig. 236*

236. LA CHAIRE A CALVIN: *Two gravid mares, facing*

The climax of primeval sculpture was not reached until the middle Magdalenian period. The dimensions of individual animals in Solutrean sculpture are modest in size — usually less than three feet. The outstanding works of the Solutrean period are in the open rock shelters of Le Roc de Sers and La Chaire à Calvin (both in the Charente).

379

On a vertical block in Le Fourneau du Diable (Dordogne) a number of animals have been carved which display a high perfection in the modeling of every part of their bodies.

High reliefs of the Magdalenian period

after 382

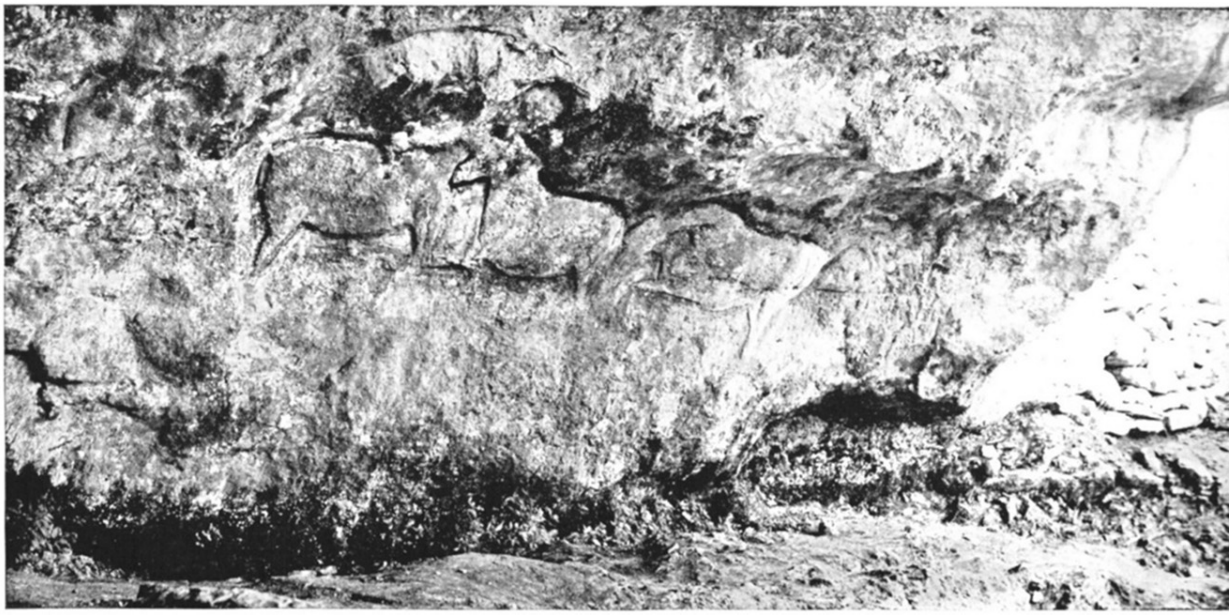
The most concentrated display of prehistoric sculpture is to be found a few miles from Les Eyzies (Dordogne), in the small valley of the Beune. Its level floor and steep, partially wooded limestone sides formed an ideally sheltered habitat for upper paleolithic man. Approximately halfway up its right flank are two rock shelters and their terraces. The larger of the two contains the fertility sanctum of Laussel; the other, Cap Blanc, shelters a boldly sculptured frieze of horses. No other prehistoric frieze can equal this in size or daring.

391

In the unobtrusive cavern of Commarque, on the opposite side of the valley, is the most beautiful relief of a primeval horse, amid other representations.

394

The two bison of Le Tuc d'Audoubert (Ariège), though different in technique and material (molded clay), are most probably contemporary with the Cap Blanc frieze of horses.



237. LA CHAIRE A CALVIN: *Frieze of animals in rock shelter. With drawing*

SOLUTREAN ROCK FRIEZES

La Chaire à Calvin

left

Lying beneath "fairly old" Magdalenian levels, this relief was discovered and carefully excavated by P. David in 1926. It lies at the entrance of a small cavern, whose interior contains interesting traces of Magdalenian habitation on different levels, lying one over the other, almost like successive floors.

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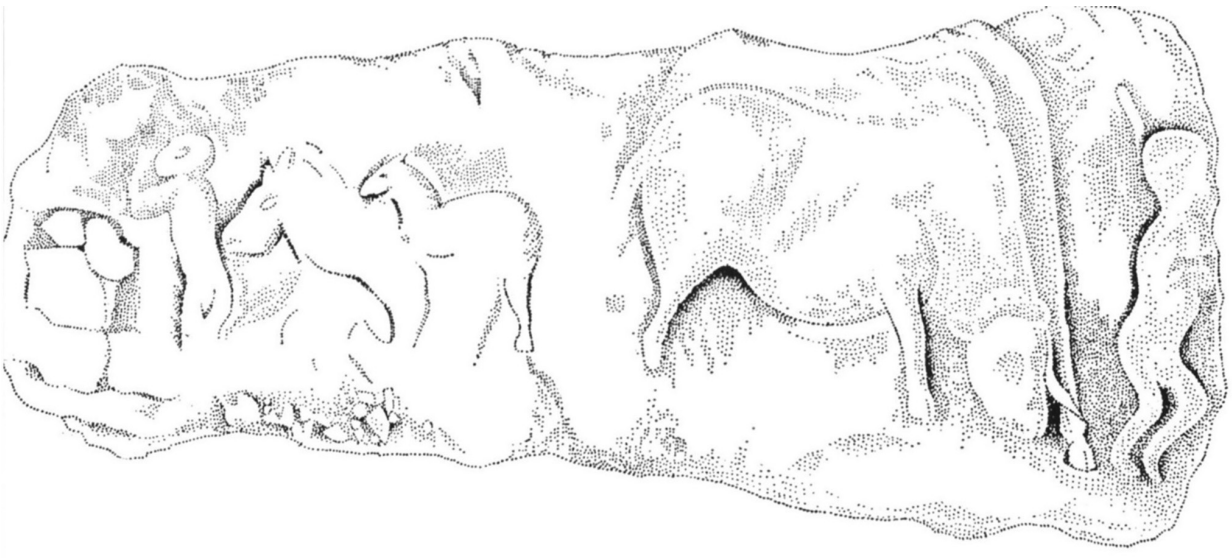
The frieze catches the full daylight on the slightly projecting rock wall in which it is firmly embedded. Its condition is impaired "by mosses, lichens, and stalagmite excretions" (David, 1934, p. 378). There are depicted in succession: a gravid mare without a head; a second gravid mare, facing towards her; at the extreme right perhaps the mating of a mare and a stallion. As in the following relief at Le Roc de Sers and, in all probability, the late Solutrean relief at Le Fourneau du Diable, the subject matter relates to fertility.

Le Roc de Sers

While excavating a steep slope at Le Roc de Sers in 1927, Henri Martin encountered an unquestionably Solutrean stratum on a platform measuring approximately thirty-seven square meters. In the background, close to a rock wall, there came into view a whole series of loose rocks (Martin, 1928, p. 33). When, after a detonation, a block was washed off, they discerned a horse "the size of a fox hound" (p. 57). All the blocks lay with their sculptured sides downwards. Whether they had become loosened from the rock wall in the course of ages or whether, according to Henri Martin's reconstruction, they once formed a segment-shaped cella is not absolutely certain. In 1950, however, when R. Lantier undertook further excavations, together with the discoverer's daughter, Germaine Martin, he found still more animal figures in contact with the rock.

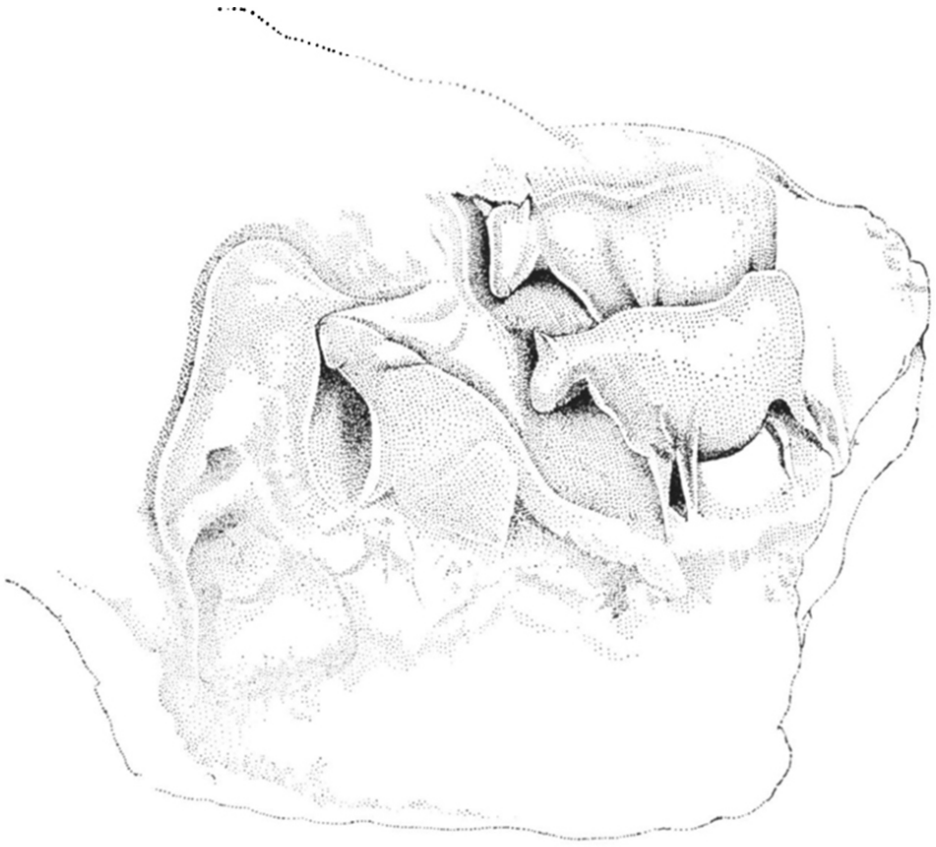


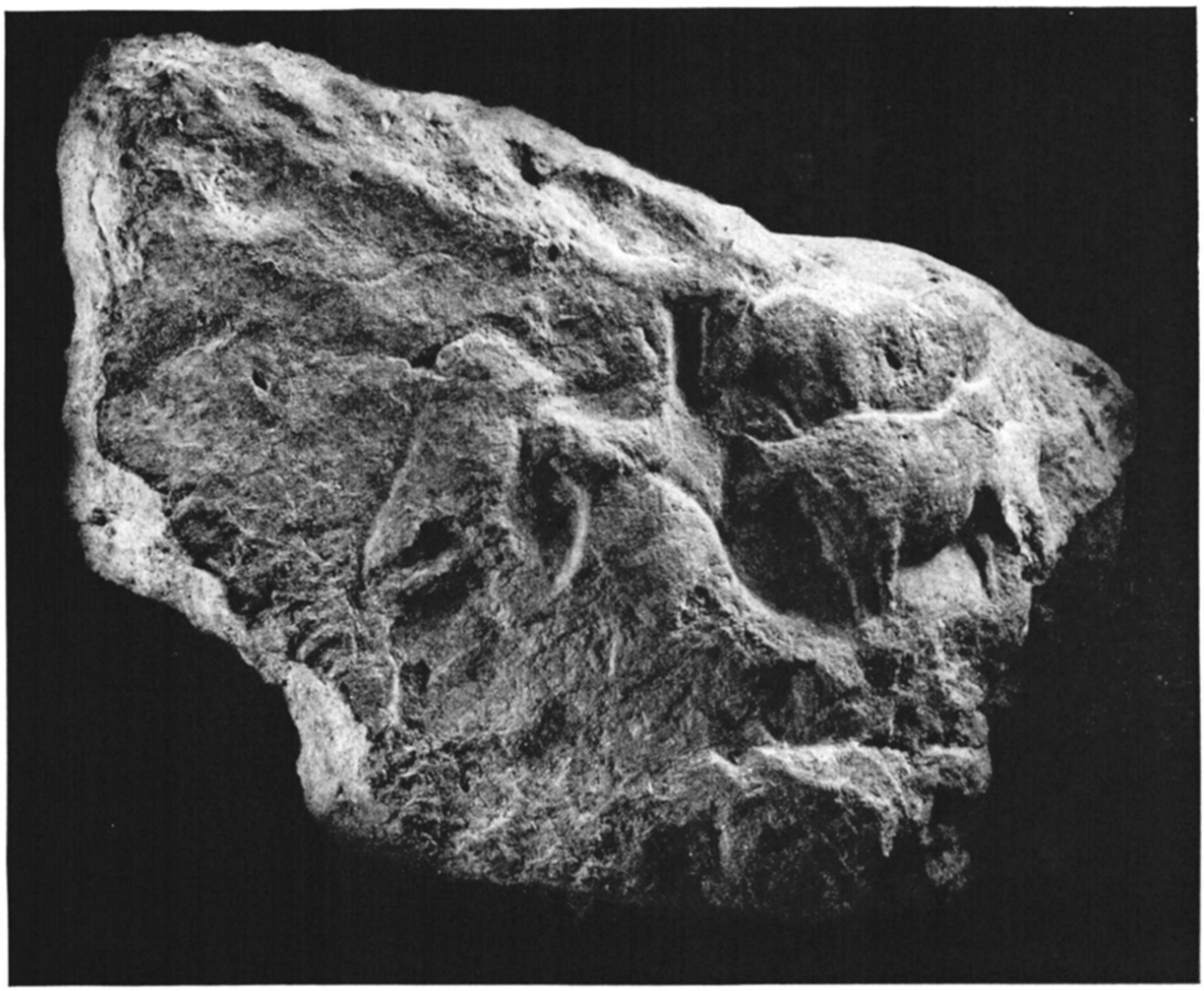
238. LE ROC DE SERS (*Charente*): *Stone block* (*1.52 m.*): *at left, two horses pursuing a human figure; right, another figure attacked by a bull. Drawing after H. Martin*

239. LE ROC DE SERS: *Female bison with head of sow*

240. LE ROC DE SERS: *Small gravid mare following bison with sow's head*

241. LE ROC DE SERS: *Two ibexes facing one another*





242. LE FOURNEAU DU DIABLE (*Dordogne*): *Block covered with animal figures, With drawing*

243. LE FOURNEAU DU DIABLE: *Detail showing two strongly modeled cows and the blurred figure of another animal in a vertical position*

377

The large blocks found by Martin are now mounted most disadvantageously near the ceiling of the museum at St-Germain-en-Laye. The reliefs comprise chiefly bison and horses, a combination which occurs time and again in prehistory. But in 1950 Lantier found two ibexes symmetrically confronting one another like heraldic supporters: these are sculpturally the most beautiful of all the figures at Le Roc de Sers.

375

Like the rock shelters of Laussel and La Chaire à Calvin, Le Roc de Sers is a fertility shrine. Many of these reliefs are full of action. On a block (1.52 m.) at the extreme left of the frieze two nude human figures are depicted, at its extreme ends. The one on the right is attacked by a bull. In its movement and flexibility, this animal is a fine achievement of Solutrean sculpture. Its grandeur is in strong contrast to the pitiful, naked figure of the man in flight at the outermost edge of the block, his knees bent in abject fear: one more confession of how inferior man must have felt when confronted with the natural majesty of the animal.

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The long block (1.64 m.) found on the extreme right depicts a fertility scene. A small gravid horse follows a greatly distended female bison. In order to indicate the wish for procreation, a male animal usually follows a female of the same species. On this block at Le Roc de Sers, it seems that the wish for procreation could also be expressed by placing one animal behind another, even though they were not of opposite sex and belonged to different species. Moreover, the female bison is a composite figure. The body of the bison has the head of a sow. It has been frequently said that this head was subsequently changed from a bison head to a sow's head. Yet H. Martin stresses the fact that there are no traces of subsequent change on the block and that the figure of the animal "appears to have been executed in a single stroke" (Martin, 1928, p. 62). He justly points to the engravings of composite figures found in the cavern of Les Trois Frères (Ariège) and in other places, where there was no doubt they were so conceived from the very beginning. Whether these curious composite animals had their origin in cult worship or in a need to procreate desirable attributes through hybridization, or whether some accidental occurrence caused this result, remains uncertain.

Of all high reliefs of the Solutrean age as yet known, the frieze of Le Roc de Sers is the most outstanding. It shows more distinctly than the relief of La Chaire à Calvin the particular technique of primeval sculpture: the achievement of effects of light and shadow by hollowing out the rock around the image or by scooping the image out of the rock face. The size of the individual animals is comparatively small (40–70 cm.): the deep carving which lifts the outline out of the rock does not exceed six centimeters. As ever, the animals are not ranged along a horizontal base line. They stand on different levels of the undulating terrain.

Le Fourneau du Diable

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In 1924, Peyrony found two overturned blocks in an upper Solutrean stratum of the rock shelter of Le Fourneau du Diable (Dordogne) (Peyrony, 1932, p. 54). One of them was covered with eleven fairly well-preserved animal figures: primitive cattle and perhaps also a horse. Two strongly modeled cows are reproduced here because they furnish a typical illustration of the technique of stone engraving used in the late Solutrean epoch. The interest in bold modeling comes out particularly in the treatment of the lower animal. Quietly standing, its feet planted on the ground, this figure seems anchored in the rock. Even more pronounced than in the relief in Le Roc de Sers, the animal's contours have been scooped out of the flat surface of the rock and thereby brought up into high

relief. To the left of this gravid cow, and seemingly climbing upward, is the somewhat blurred figure of another animal. As has been repeatedly emphasized — regarding Pech-Merle as well as Lascaux — this position need not represent clambering upward. The line of this animal's back, together with the hollowing out of the natural rock surface, form the necessary *repoussoir* for the gravid cow, which was executed with such special care. By this means the effect of light and shadow, so distinctive of high relief, is used to bring out the fore part of the "clambering" animal, while its hindquarters are formed from a natural rock projection. The continuation of this sculpturally most developed high relief of the Solutrean epoch appears in the frieze of Cap Blanc. The modeling technique remains the same, but the dimensions have become monumental.

MONUMENTAL MAGDALENIAN RELIEFS

The horses of Cap Blanc

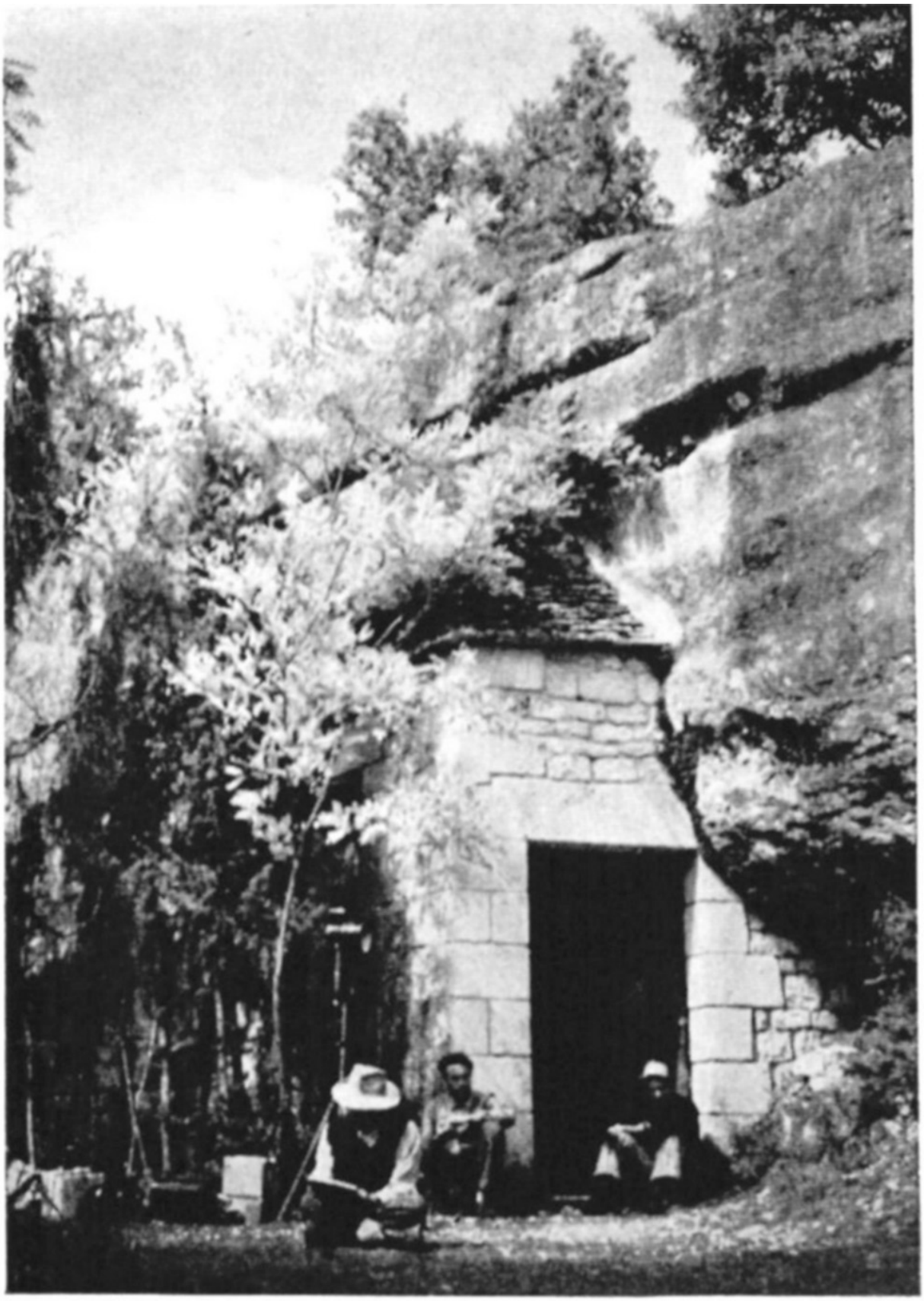
below

The frieze of seven horses at Cap Blanc (Dordogne) was carved in high relief beneath a sharply projecting rock overhang whose curving underside was the carefully selected site for the placement of these animals. The frieze was in shelter, yet the light pouring in from above produced a changing plasticity of sun and shadow. This effect is now unfortunately destroyed by the erection of a protective wall in barbaric proximity. We have tried to present a total impression of the frieze by a sequence of five photographs: the protective wall makes it impossible to gain enough distance for an over-all shot.

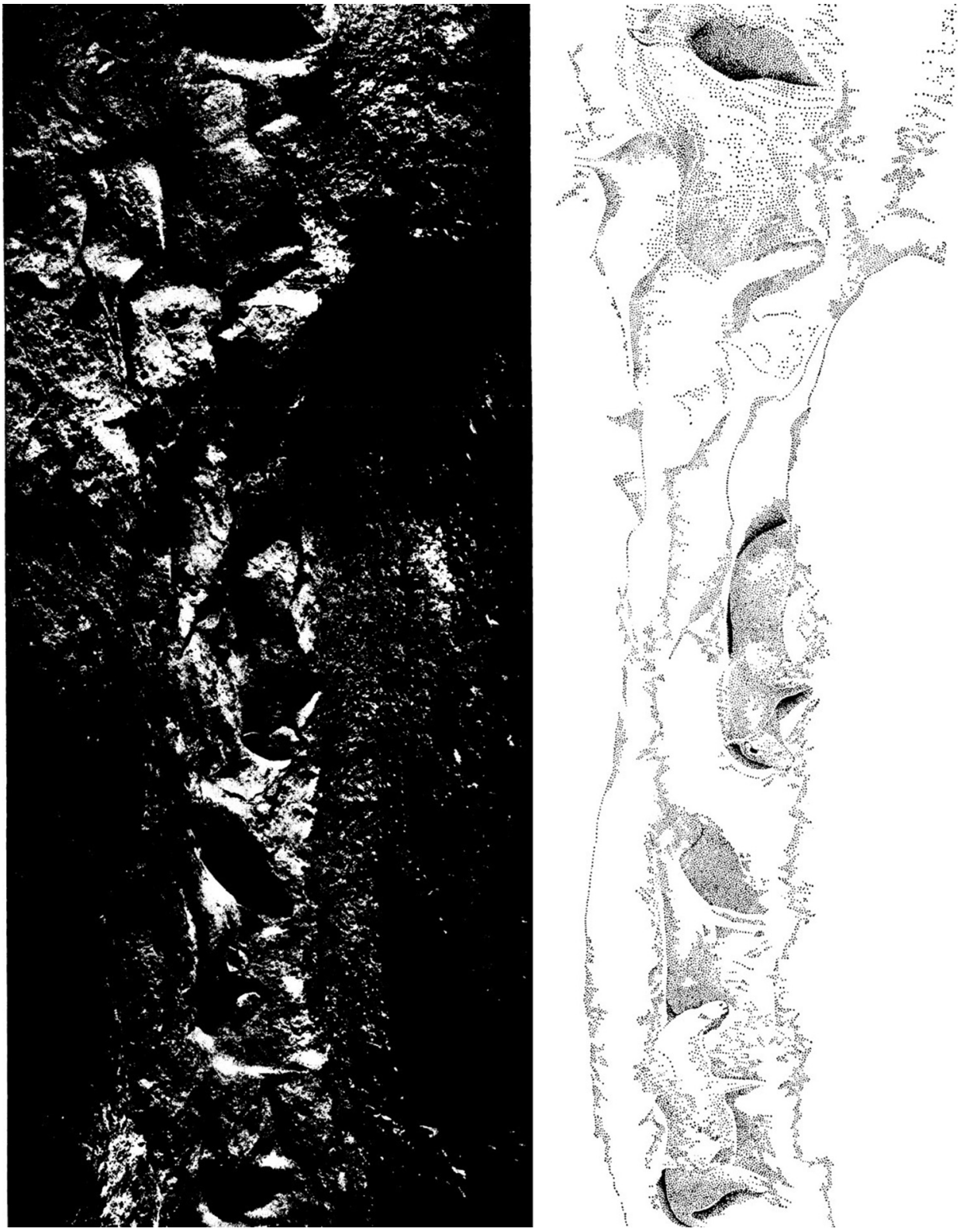
This frieze was discovered by chance in 1911 by a foreman working with Dr. Lalanne, the excavator of the neighboring rock shelter of Laussel.

The Cap Blanc overhang starts to rise from the level of the terrace, at the extreme left; it then rises, slowly descends, rises again towards its end, and terminates in a small space, roughly circular. The floor of this natural rock shelter was covered with slabs.

The frieze presents a sequence of large horses of exceptional plasticity. Above them are indications of various other animals and a hand, roughly hewn into the rock.



244. CAP BLANC (*Dordogne*): *Entrance to protective shelter constructed over the abri*



245. CAP BLANC: *The main part of the frieze of horses. With drawing*

387

Undoubtedly, the focal point is a large horse (2.3 m. from head to tail), approximately in the center of the frieze. Reserve must here be exercised: this is no apotheosized central figure, which, as in a Greek pediment, acts as a vertical center point. It is

placed, in fact, even lower than the other animals, owing to the shape of the natural rock, and it stands quiescent, somnolent; a creature sunk into itself: more god than animal.

The entire frieze was completely buried in debris, and much of its upper part, particularly on the right, had been damaged by the blows of pickaxes before anyone was aware of the existence of the sculptures. The center horse, owing to its low position, is therefore the best preserved, and it provides us with a rare insight into the technique employed. Only its lower part is missing, through decomposition of the rock.

The procedure of creating a primeval high relief is here particularly evident. Its plasticity is the result of peeling away the rock around the forms. The relief can never step outside the limits of the living rock. This is in strong contrast to the Grecian high reliefs.

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The head of the horse in the center grows out from a curving, man-made hollow in the rock and, at its slightly damaged muzzle, again becomes fused with the rock surface. A hollowing-out brings to light the underside of its chin. The neck and breast are formed, in full plasticity, from an abstract plane which recedes to a depth of thirty-five centimeters. This receding tilted plane is the only carefully and evenly smoothed surface in the entire frieze. The horse's hide is comparatively much rougher. The lines of the back and hindquarters have been accentuated by the same technique of hollowing out the rock surface, though it is very probable that the line of the back, as so often elsewhere, already existed in the natural rock and formed the point of departure for the whole relief.

All parts of the animal are visible to the eye, but this representation cannot be termed naturalistic. There are everywhere vestiges of the natural rock in which the animal was perceived. The mane suddenly merges with the rock: the shoulder, together with a part of the body, are not rounded in accordance with the naturalistic image. They approximate to the natural form of the rock and were certainly determined by it. Remains of red ocher betray the original red coloring of the frieze.

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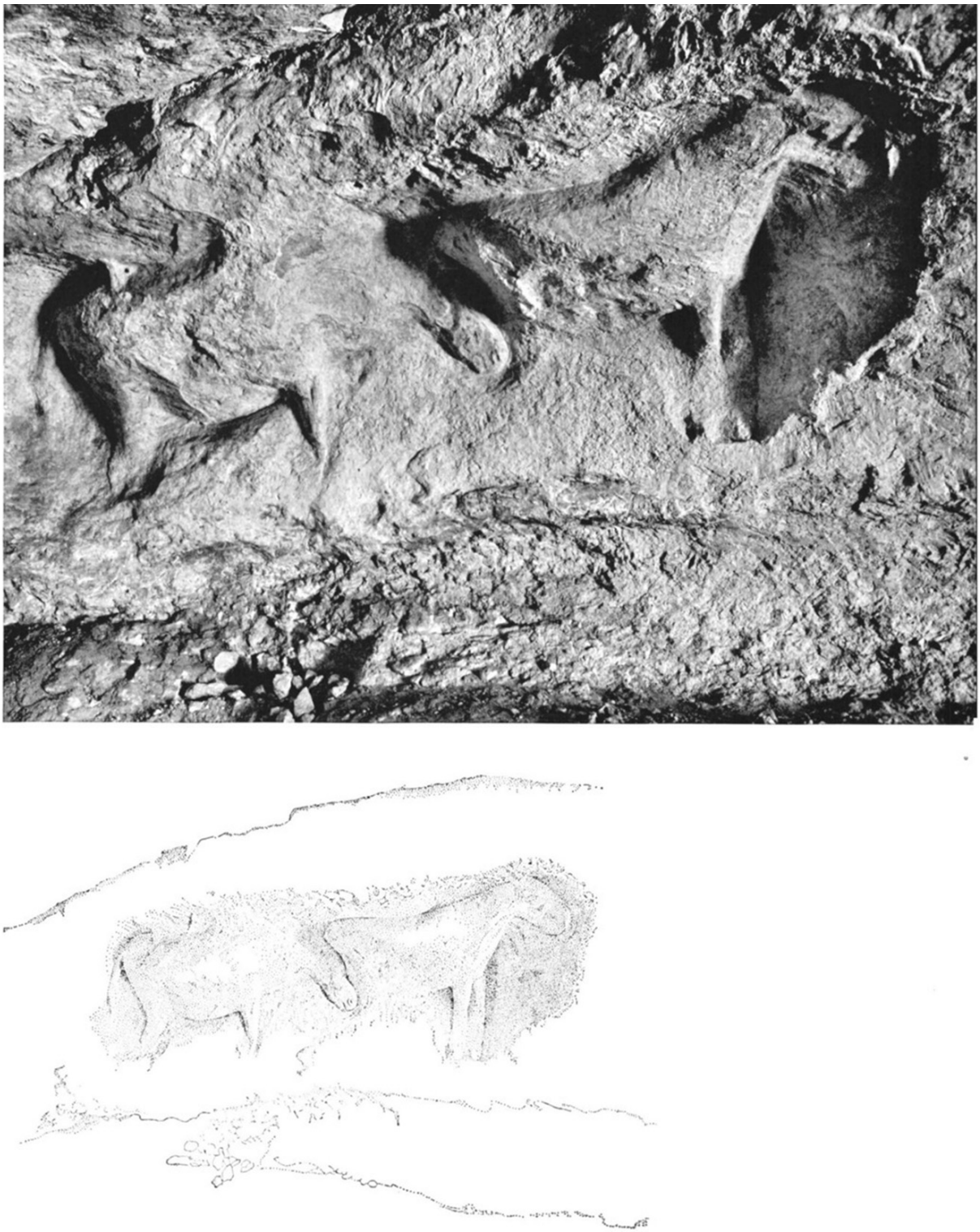
The frieze starts on the left with the most strongly sculptured horse. It is a "mare in foal" (Breuil, 1952, p. 284). The protrusion of its magnificently sculptured rump and the curve of its swelling belly are carved out of the rock to a depth of half a meter. The back of this horse is linked to the overhang by a triangular wedge of stone containing a circular perforation which probably served (as we mentioned earlier) for the suspension of sacrificial donations. The head of this horse cuts across the body of the badly damaged second horse of the frieze.



246. CAP BLANC: *The first two horses, the one to the left a mare in foal; the other is badly damaged. With drawing*

247. CAP BLANC: *Detail of hindquarters of the first horse, showing it linked to the rock overhang by a perforated wedge of stone*

To the right, after the reposeful figure of the central horse, the undisturbed surface of the rock is again exposed. Badly damaged and partly unfinished horses, as well as the rear part of a bison, then follow. The most easily recognizable is the taut neckline of a horse, brought forward by the cutting away of a deep hollow alongside it. The entire configuration reveals that quiet serenity which frequently appears in classic periods of art. The frieze also displays one of the consistent features of primeval art: none of the animals stand upon the same level. A flow of movement up and down pervades the entire composition. The classically trained eye will look in vain for a common

horizontal base line. Rock and animal live together in an intimate contact never again achieved.

Here in this great frieze, if anywhere in primeval art, the leap to sculpture in the round would appear imminent. All the necessary conditions are to hand: mastery of material, knowledge of how to handle the surface of the body, a grand condensation of the outline.

From here it would seem but a step to the Grecian sculpture in the round. But nothing of the sort occurred. The high relief at Cap Blanc, a primeval parallel to the Parthenon frieze, signified the utmost limit of paleolithic sculpture. A separation from the rock face, the detachment of a statue, was contrary to the primeval feelings of the indissoluble oneness of everything existing: feelings which manifest themselves again and again in primeval art.

The horse of Commarque

In the valley, lying obliquely across from Cap Blanc and within approximately twenty minutes' walk from it, lies the cavern of Commarque (Dordogne). A mighty overhanging ledge covered with decaying oak trunks forms a narrow gateway. These trunks were at one time intended for use in restoring the medieval castle of Commarque, which stands in ruins above the rock wall.

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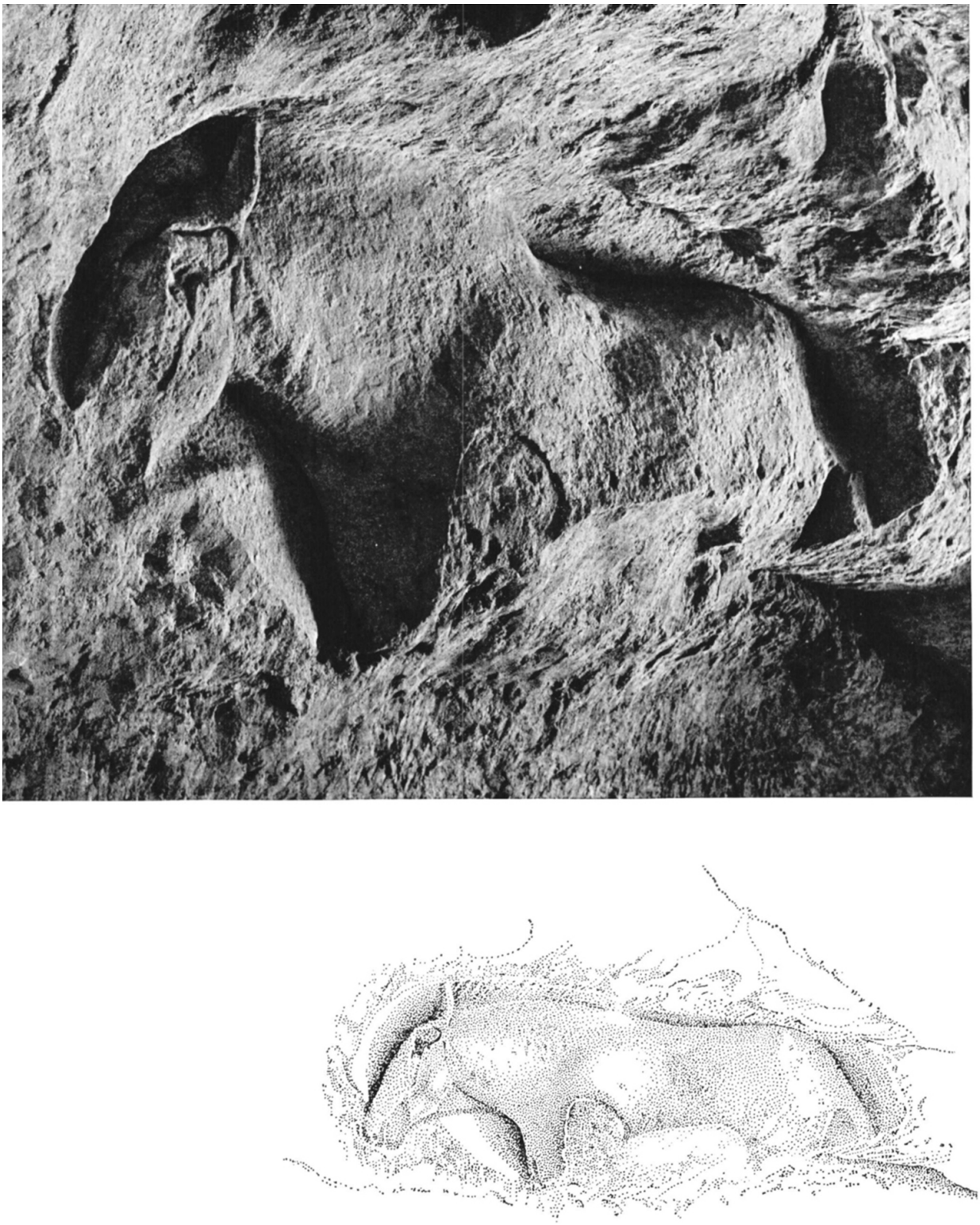
The cavern is small and branches out into two short galleries. The right gallery contains most of the representations. These are again mainly of horses. The quality, size, and state of preservation of these horses are very unequal. Some had only just been started. The small high gallery soon becomes so narrow that two people cannot stand side by side. Here the relief of the largest (2.05 m.) horse appears on the sloping surface of the rock wall. This animal is embedded in the rock: only recognizable from certain angles and with certain light. When it appears it possesses an irresistible strength. Everything is there: the sensitive nostrils and vibrating muscles. Parts of the body as well as the eye and windblown mane are formed from irregularities in the natural rock.



248. CAP BLANC: *The central horse. With drawing*

393

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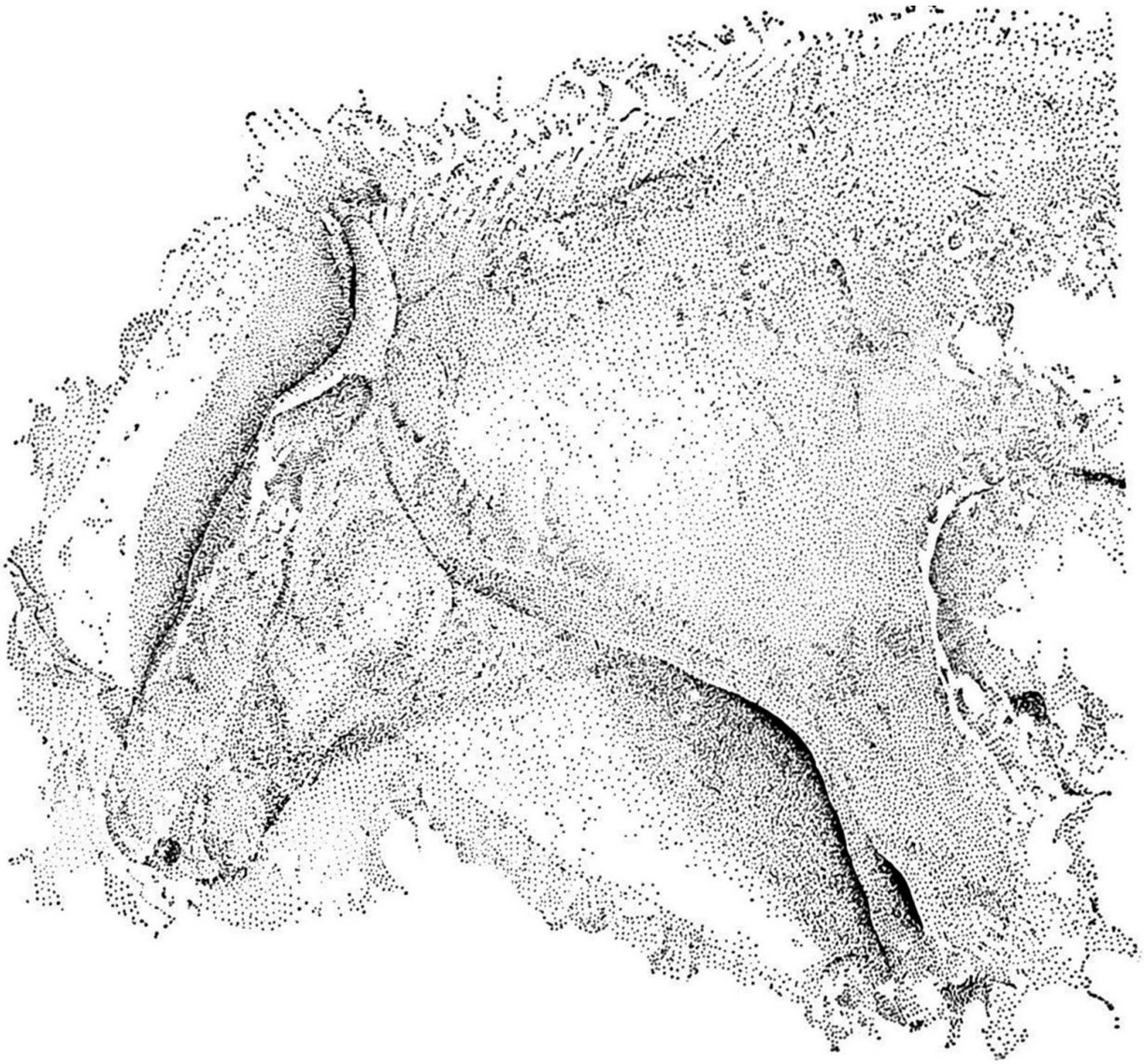
The entire head, slightly inclined, readily follows the rock. The predestined form of this long, slender head (47 cms. from ear lobe to muzzle) emerges distinctly from a

natural cleft. Eye and nostrils have been clearly traced. Indications of its loose coat are not omitted. A well-nigh breathing image emerges, and yet it eludes our grasp. We tried several times to photograph this most magnificent horse in primeval art. It has never been recorded before. We succeeded only once. The difficulty is by no means due only to the narrowness of the gallery and similar obstacles. The difficulty lies much more in the delicacy of the form, which becomes revealed only when the light strikes it at a certain angle. It is a wild untamed horse. A horse that blooms out of the rock in absolute freedom. A horse before its enslavement by man. What this means can be seen by comparing it with a horse from the tomb of the emperor T'ai Tsung (7th cent.), of the T'ang Dynasty. Here a saddled war horse is represented as quietly waiting for its master, the Chinese Emperor. Undoubtedly a noble animal but completely subdued in the service of man.



Drawing for fig. 249

249. CAP BLANC: *Head of the central horse*

389

In comparison both with the T'ang horse and with the placid central horse at Cap Blanc, this horse at Commarque appears full of fire, almost agitated. Though it belongs to the

same general period as the latter, it is a far more sensitive creation and probably somewhat later in date.

The bison of Le Tuc d'Audoubert

394

In the cavern of Le Tuc d'Audoubert (Ariège) one must climb through three levels before reaching an entrance that bears the impress of feet of the Magdalenian period. (These heel marks lead one to believe that this is a place similar to the Hall of the Hieroglyphs at Pech-Merle, with the bird-goddesses upon the ceiling.) At the uttermost end of the cavern, beneath a high vaulted roof, a pair of clay-sculptured bison have been placed upon a kind of altar.

Since this cavern was discovered in 1912 by the Comte Bégouën and his three sons, nothing equal to it has been found. Bégouën, at that time professor of paleontology in the University of Toulouse, has described the route so vividly that it is better to let him tell, in his own words, how in this cavern one does not as usual clamber downward but must scramble steeply up narrow chimneys and across great halls before one reaches the bison pair.

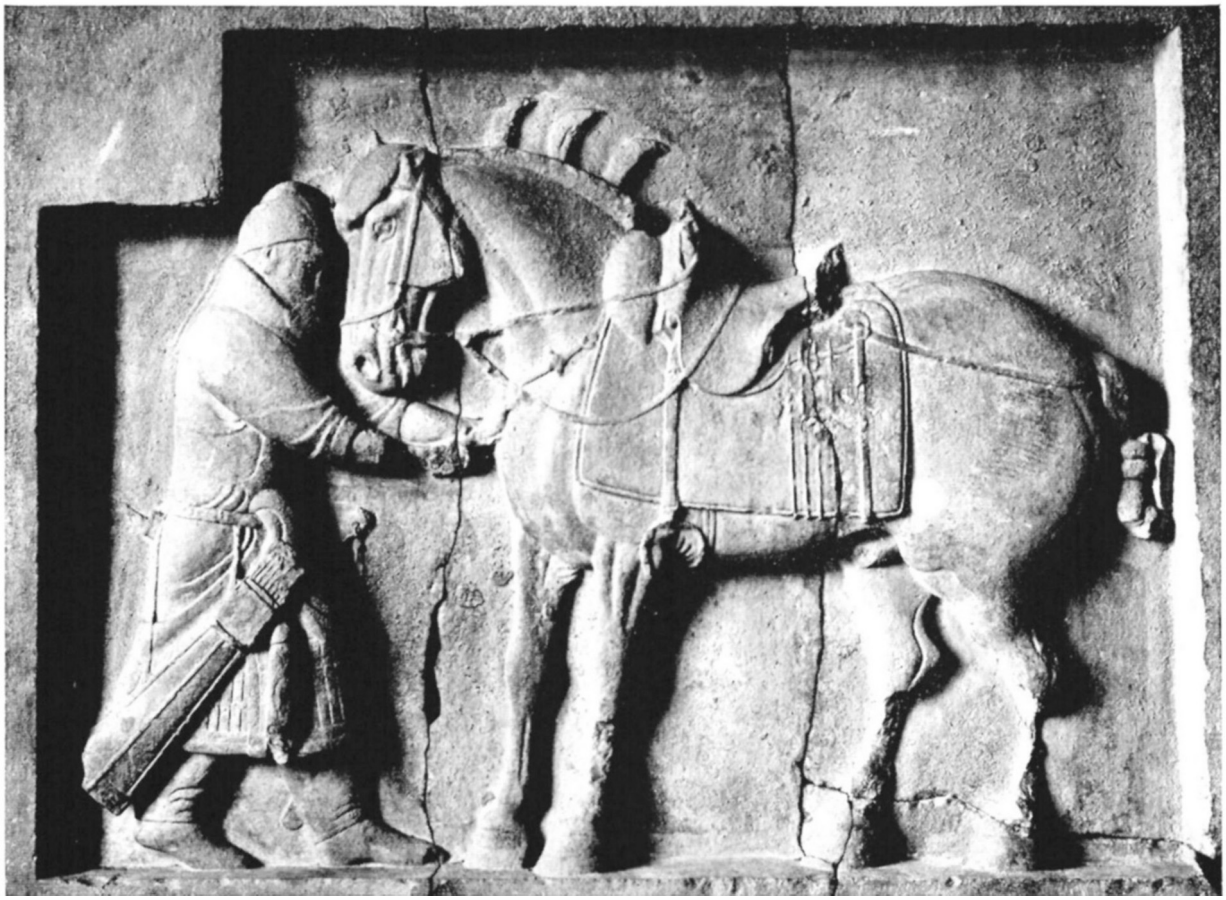
Drawing for fig. 250

250. COMMARQUE (*Dordogne*): *Head of a beautiful horse on the wall of a narrow gallery*

"Quite at the end of one of the raised passages of the cavern of Tuc d'Audoubert, at least 1700 meters from the entrance, my sons and I, on October 10, 1912, found the clay sculptures of bison.

"Access to this terminal passage was exceedingly difficult. Entrance to the cavern itself is blocked by a stream formed by the rising of the river Volp. One must penetrate below the earth in a boat . . . before reaching passages studded with pools of water but which can be traversed with dry feet when the water is low. The cavern in fact has three levels: first there is the level of the water; then, about 150 meters from the entrance, one reaches the second level by climbing to a small ledge two meters high; from there a passage opens upon vast halls adorned with superb calcareous deposits of a shining whiteness and the most picturesque forms. . . . In a far corner of one of these halls is a rock chimney which at first goes straight up, then curves. One must clamber up this for twelve and a half meters, gripping onto projections of the rock. . . . The passage which then appears at this level is narrow and uneven. In some places a few animals have been engraved on the sides. . . . The end of the chamber was very narrow, and the low ceiling was obstructed by stalactite pillars which prevented entry but permitted one to see that the passageway still continued. My sons . . . broke three of these columns. They thus made an opening . . . through which we could pass on all fours."

After this they went through several more halls until they reached the final obstacle: "a kind of ledge of clay where we saw the tracks of men and bears. To retain their footing on these slippery slopes the bears had dug in deeply with their claws, which had left long curving grooves. There were also marks of fur."



251. CHINA, *T'ang Dynasty: Horse from the tomb of the emperor T'ai Tsung, 7th cent.*

Finally they saw in the clay "the imprints of human heels. . . . A thin crystalline deposit covered the clay with a layer the thickness of an eggshell, which had admirably molded the footprints. . . . I began to ask myself if we were not in the presence of the traces of a magical ceremony. . . . We were in any case near the end of the cavern, which could have been a sort of sanctuary." (Bégouën, 1912, pp. 532–34.)

Le Tuc d'Audoubert is one of the few caverns which still preserves its primeval aspect. It has never been opened to the public, owing to the difficult approach which the Comte Bégouën describes so vividly.

There was no other place for a sanctuary except this ultimate hall, which would seem predestined for it. Approximately in the center of the hall lay a sloping block of stone deeply embedded in the clay floor. It seemed like an altar placed there by nature and must have been regarded as such, becoming the site for an impressive procreation scene.

Upon this inclined rock surface the Magdalenian artists modeled a male bison and a female bison, whose nervous widespread nostrils may indicate her excitement just before the moment of mating.

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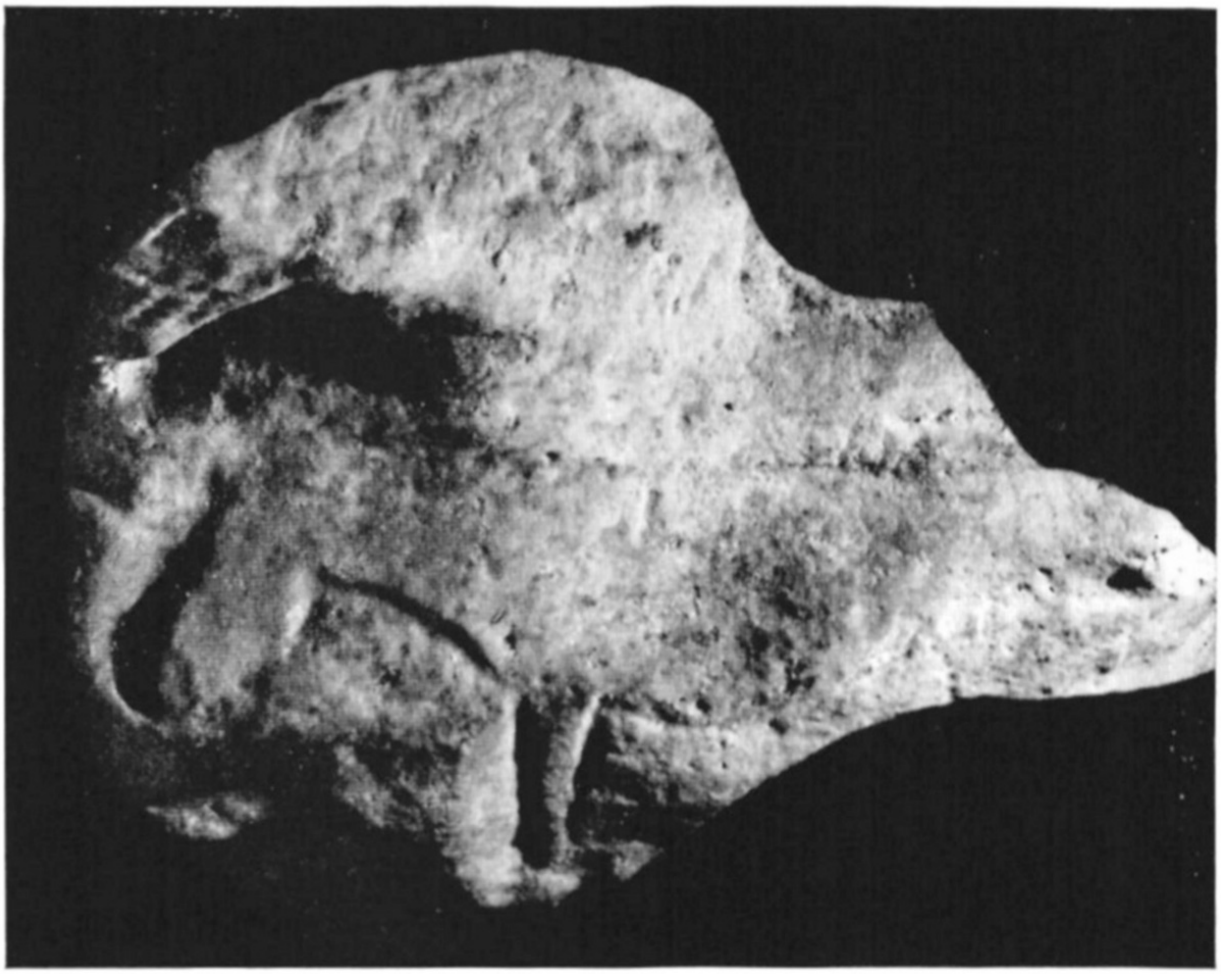
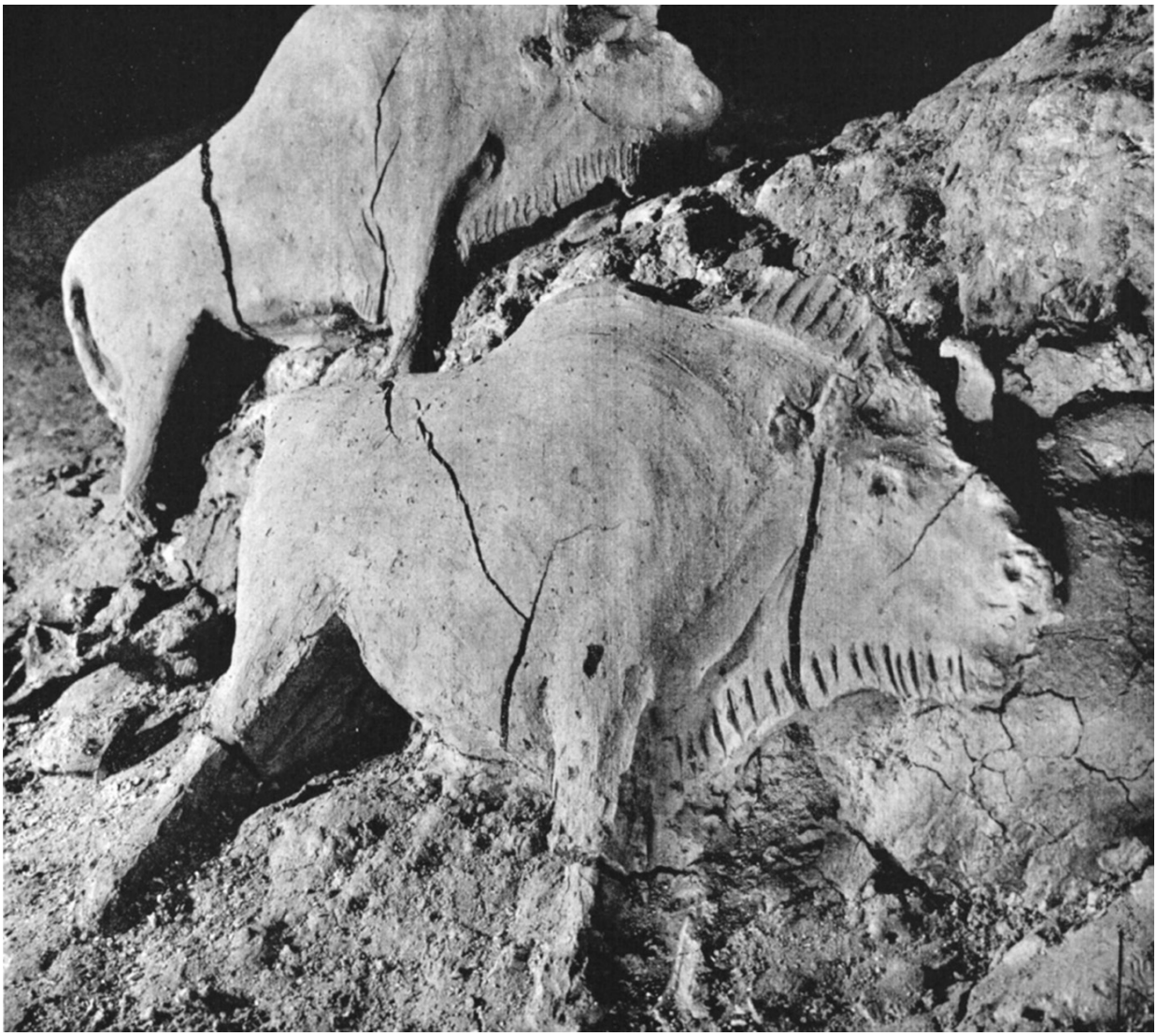
252. COMMARQUE: *Horse engraved in the right gallery*



253. COMMARQUE: *One of the engraved horses seen through a natural rock opening*

254. Photographing the beautiful horse of Commarque



255. LE TUC D'AUDOUBERT (*Ariège*): *Male bison about to mount a female bison, modeled in clay upon an inclined bed of fallen rock*

These animals are shaped in clay, a procedure very unusual for the Magdalenian age. Here the medium responds to the special conditions of the site, and the result is highly original.

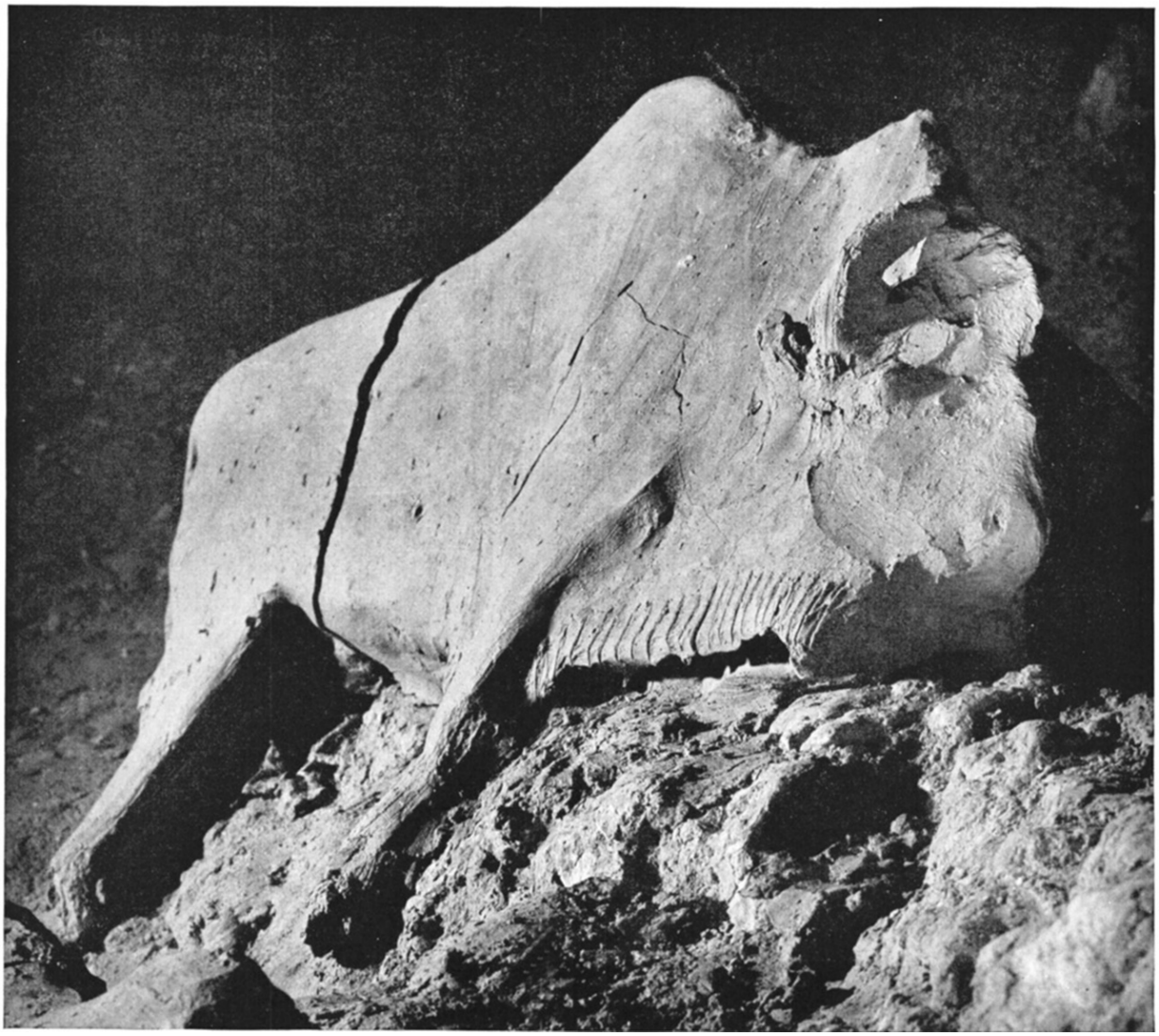
It seems that, to the Magdalenian eye, the rock face may have contained the innate animal forms for which they were ever on the alert. So they took full advantage of the sloping surface and the cavern clay to create this fertility scene.

The objection may be raised that this masterpiece is in complete contrast to the sunken relief so frequently used in prehistoric sculpture. This is true, but only when regarded superficially.

below

What is achieved here is a unity similar to that of the frieze of horses at Cap Blanc. The back of the male bison juts out strongly, but his feet almost merge into the rock. No ideal neutral plane serves as a background. It comes and goes. The animals are moving

through a natural environment and, in spite of the difference of materials—clay and rock — they achieve an inseparable oneness. In them a mastery both of the outline and of delicate surface modeling rises to a height unequaled by later discoveries.



256. LE TUC D'AUDOUBERT: *The male bison*

If proof is ever needed that monumentality does not depend upon size, it is here. The modeling is so strong that it emanates in space and dominates the hall. Yet the male bison measures but 63, the female 61 centimeters.

This is Magdalenian art at its peak.

257. LE TUC D'AUDOUBERT: *Unfinished bison on the floor of the cavern, to the right of the rock bed*

THE GREAT COMPOSITIONS

COMPOSITIONS IN LINE

The major preoccupation of prehistoric art, from beginning to end, was the attainment of an ever greater mastery of the outline. Within the outline the essential features of an animal must be captured with the utmost economy. So it is not altogether surprising that something highly unusual in art occurred: line drawings took on a monumental character.

51

To give but three instances: the clay drawings on the ceiling of the Hall of the Hieroglyphs, at Pech-Merle, which have already been described in various contexts; the Chapel of the Mammoths, also Pech-Merle, from the early Magdalenian period; finally the largest line drawings in the Salon Noir, at Niaux, from the fully developed Magdalenian.

The Chapel of the Mammoths, Pech-Merle

after 398

In the immense "chapel" of the cavern of Pech-Merle the outlines of an animal paradise unfold upon a white wall seven meters long and three meters high. There are seven mammoths, as well as bison and oxen of a genus with pointed horns like those at Lascaux, Parpallò, and elsewhere, and — almost like an emblem of the Magdalenian era — a single large horse (1.2 m.) controlling the center of the composition.

58

The energy-packed tension of these lines was pointed out earlier in the context of a single detail, and the whole composition has been thoroughly described by the Abbé Lemozi (1929, pp. 81–93). By using a wide-angle lens, we attempted to reproduce the entire scene in one photograph.

398

The sequence of animals starts on the right with a few isolated mammoths. One of them has become covered by a translucent film of calcareous deposit. Another, one of the finest, with the long hanging hair of its pelt and no hooves, could almost serve as a symbol of primeval power emerging directly out of the earth.

56, 350

The greatest intensity of outline is found near the center of the composition dominated by the great horse, particularly in the tightly knit curves of the two bison. Such a power of binding the form of an animal within the spell of the concise outline was unknown before the Magdalenian period. An isolated bison also in the cavern of Pech-Merle is closely related to it: almost identical in treatment of the total form. It stands within a niche in the same hall, not far from two horses and a black hand.

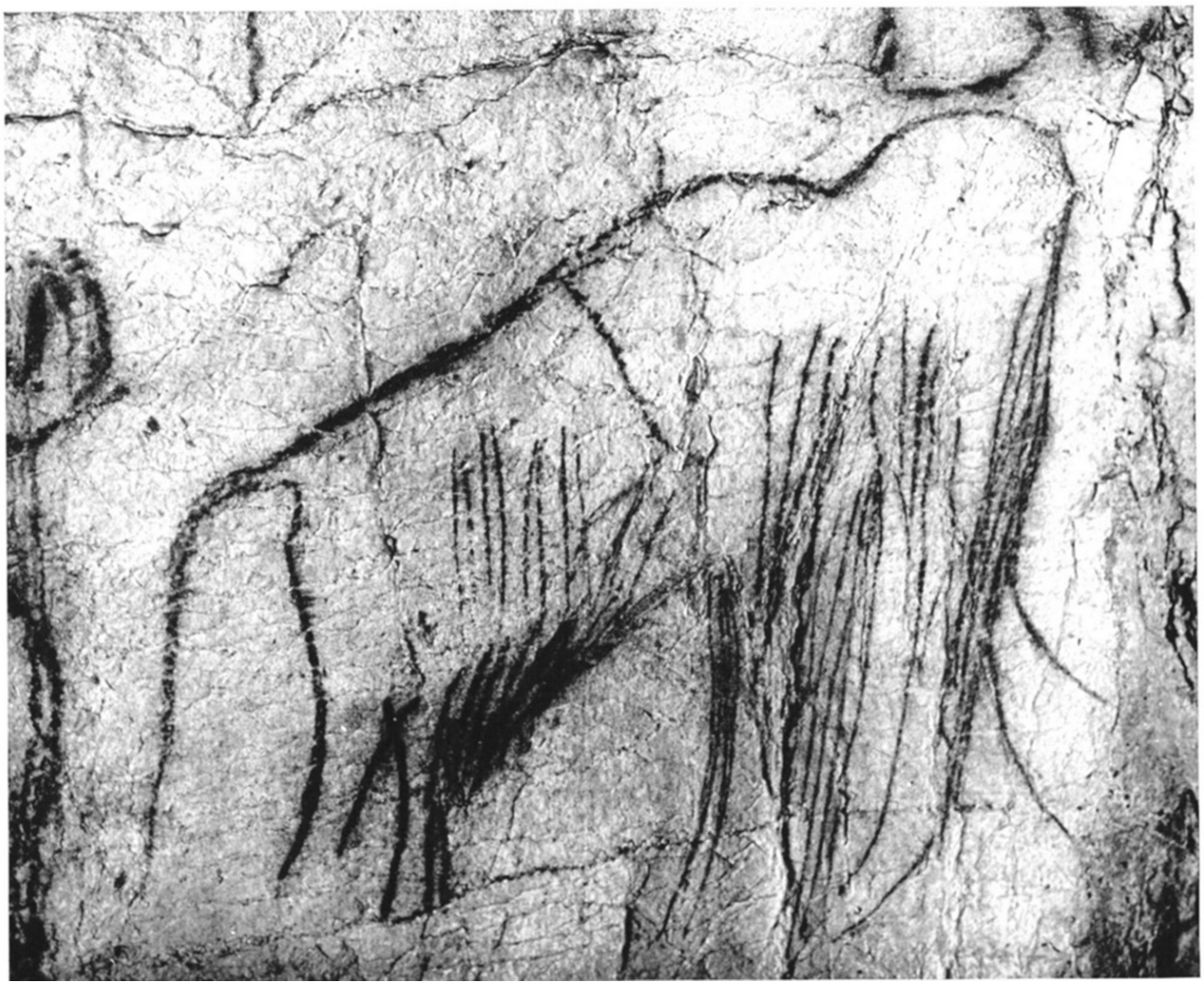
Just above the two confronting bison near the center of the frieze in the Chapel of the Mammoths, it is possible to discern the half-effaced outlines of a mammoth and a bison standing in a similar position. They loom like mountains against the sky.

A total view of the entire wall displays the whole series of animals as a continuous undulating line. Everything within the composition is informed with the same rhythm.

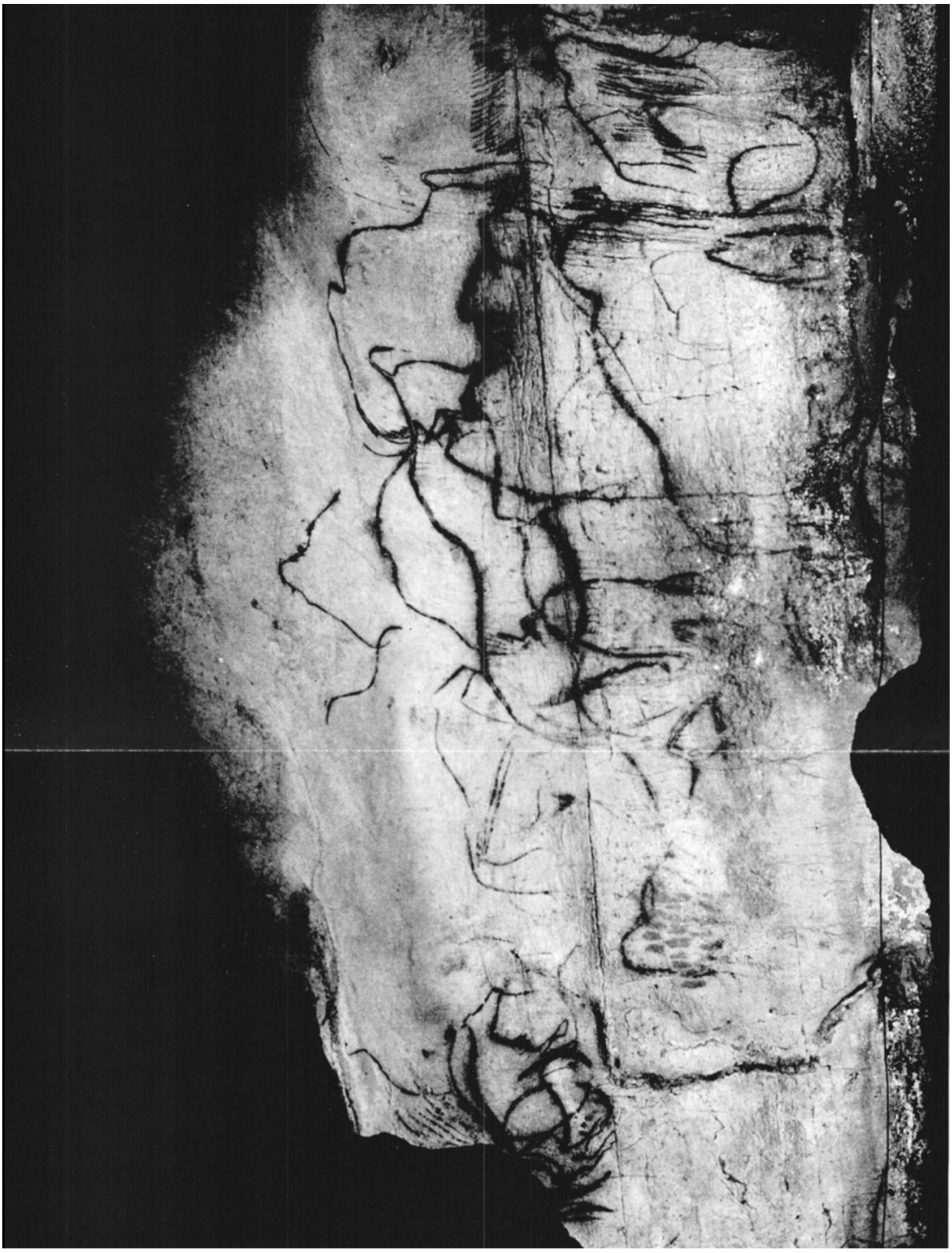
Towards the left are a number of large red dots from an earlier period, which perhaps take the form of an animal's head.

399, 416, 412

On the extreme left a fantastic scene seems to be depicted. A knot of animals appears to be falling into an abyss: two oxen, head downward, and one standing mammoth falling backward. But this is no scene of catastrophe. It is the result of the different vision of primeval man — his different space conception — as in the scene depicted in the axial gallery of Lascaux. Another representation, in Pech-Merle, of a large mammoth, which appears to be leaping across the curve of the leftmost rock niche, is even more akin to the "leaping" cow in the Lascaux scene. The similarity of these two compositions leads to the recognition of this method of representation as one of the iconographic characteristics of the Magdalenian age.



258. PECH-MERLE (*Lot*): *Chapel of the Mammoths. Mammoth with long hanging hair*



259. PECH-MERLE: *Chapel of the Mammoths. Panorama of mammoths, bison, and oxen*

260. PECH-MERLE: *Chapel of the Mammoths. At left end of wall: two oxen, head downward, and two mammoths*

Such experts as Breuil or Graziosi do not commit themselves as to the period to which the great Chapel should be attributed. As early as 1929, Lemozi set it in the Magdalenian period, though in its early part (p. 93). The tension of the outlines of the bison and the mastery of movement point to a highly developed period of the Magdalenian.

The Salon Noir at Niaux

The Salon Noir of the cavern of Niaux (Ariège) contains, in heavy black outline, the largest prehistoric drawings known. This cavern is only a few miles from the small town of Tarascon-sur-Ariège, in an outlying spur of the Pyrenees. It was formed by the

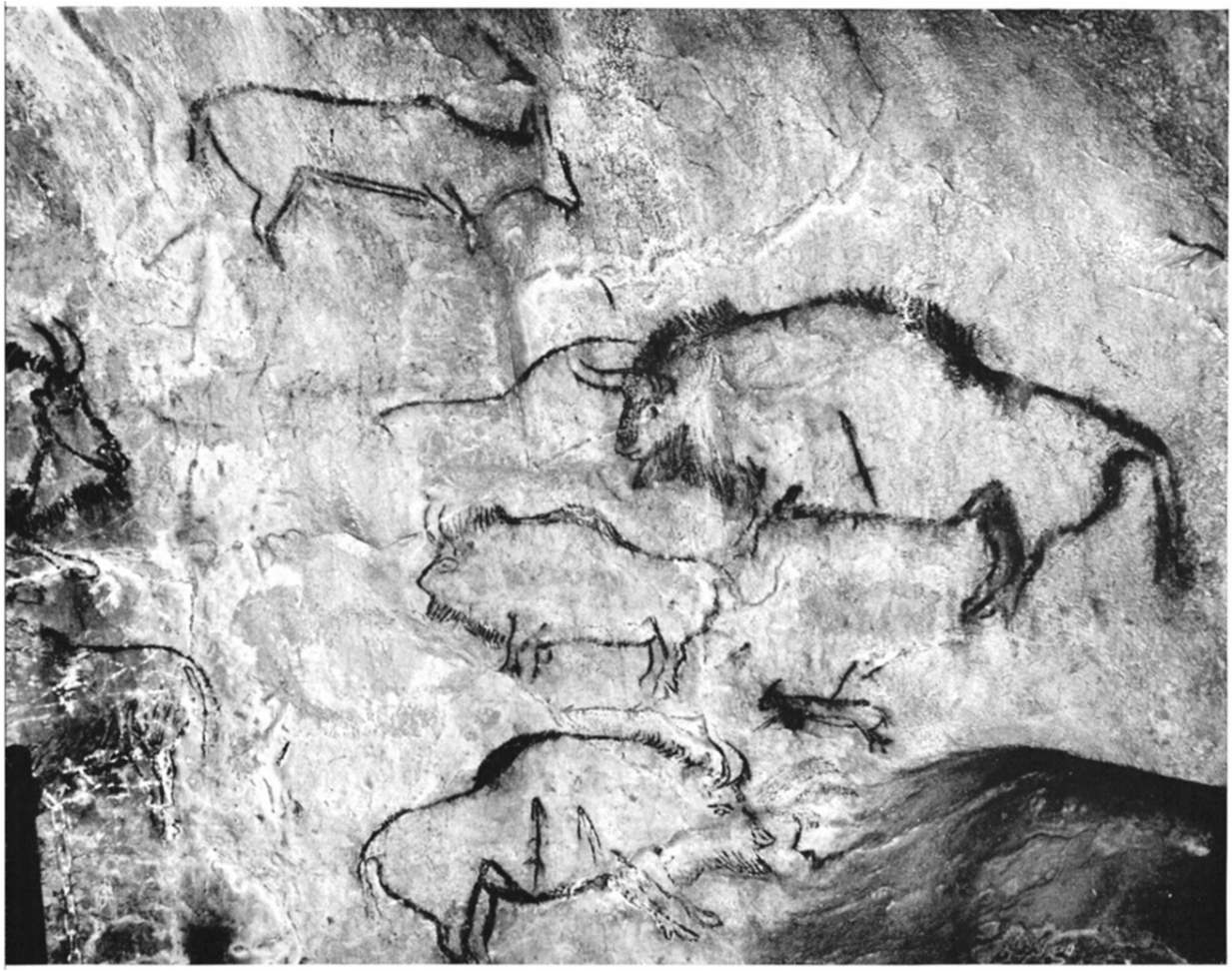
action of powerful glacial streams and is unusually high and spacious. The Salon Noir marks its highest point and is in one of the terminating spurs of the cavern. It is a somewhat oval-shaped space whose domed ceiling recedes into darkness. Its natural rock walls and recesses have been polished almost smooth by river sand, which now lies in great dunes at the entrance to the hall. These naturally formed surfaces and niches would appear predestined for large-scale compositions. The representations in a certain respect stand apart. The black line drawings, with no touches of color, appear almost like greatly enlarged pages of a sketchbook. The theme of these representations is a familiar one: horses and bison are shown in close association, and a number of ibexes stand among them.

right, 378

The bison upon the great composition to the right of the hall are ranged upon different levels, above or adjacent to one another. Some have ritual spears drawn upon them. (Only the right-hand part of this composition is here reproduced.) The animals on the Solutrean relief in Le Fourneau du Diable (Dordogne) are similarly disposed upon the rock face.

350

In the composition at Niaux no individual and terrifying animals stand out, like the bison upon the polychrome ceiling of Altamira, nor are they arranged in a continuously moving sequence, as at Lascaux. Here we simply face an impassive, featureless herd. Scattered in among them are some much smaller animals of an earlier date, among these a bison (53 cm.), whose tense, finely drawn outline (Breuil, 1950, p. 23) suggests it is of the same period as the bison in the Chapel of the Mammoths at Pech-Merle.

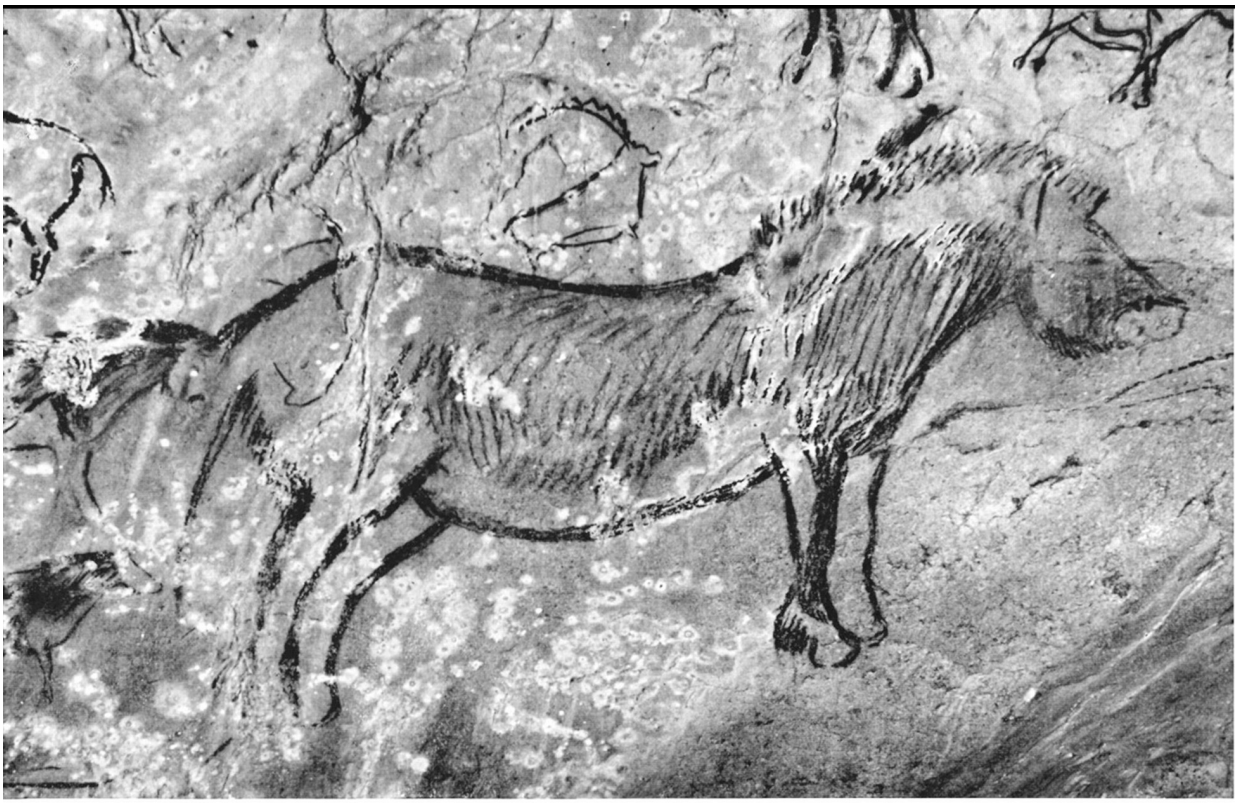


261. NIAUX (*Ariège*): *Salon Noir. Part of the large composition, with bison upon different levels*

402, 403

The larger animals are not all of the same quality, but their detailing is handled with a skill which could result only from a long tradition. Mastery of the outline had long age been achieved. It can now simultaneously express the actual texture of the animal's coat. It can be varied in strength according to need: now heavier, now lighter, now crossed by lateral strokes to represent beard, mane, or crupper. The largest animal is a horse (1.40 m.). Just as in the Chapel of the Mammoths, various kinds of hatchings have been used to bring out its rounded body and the differing character of its pelt. Some of the bison's hooves and legs are also handled with consummate certainty, almost as in a sketch by Raphael.

In his fine essay on the cavern of Niaux, Breuil comments on the "brilliant preservation" of these drawings. Their position, some eight hundred meters from the entrance, is free from fluctuations of temperature: "There is no sign of any movement of the air, it is absolutely calm. Atmosphere and walls are at the same temperature. It is because of this equilibrium, because this cavern remains in a state of natural quietude, that it has suffered no change. All might have been made but yesterday" (1950, p. 20) .



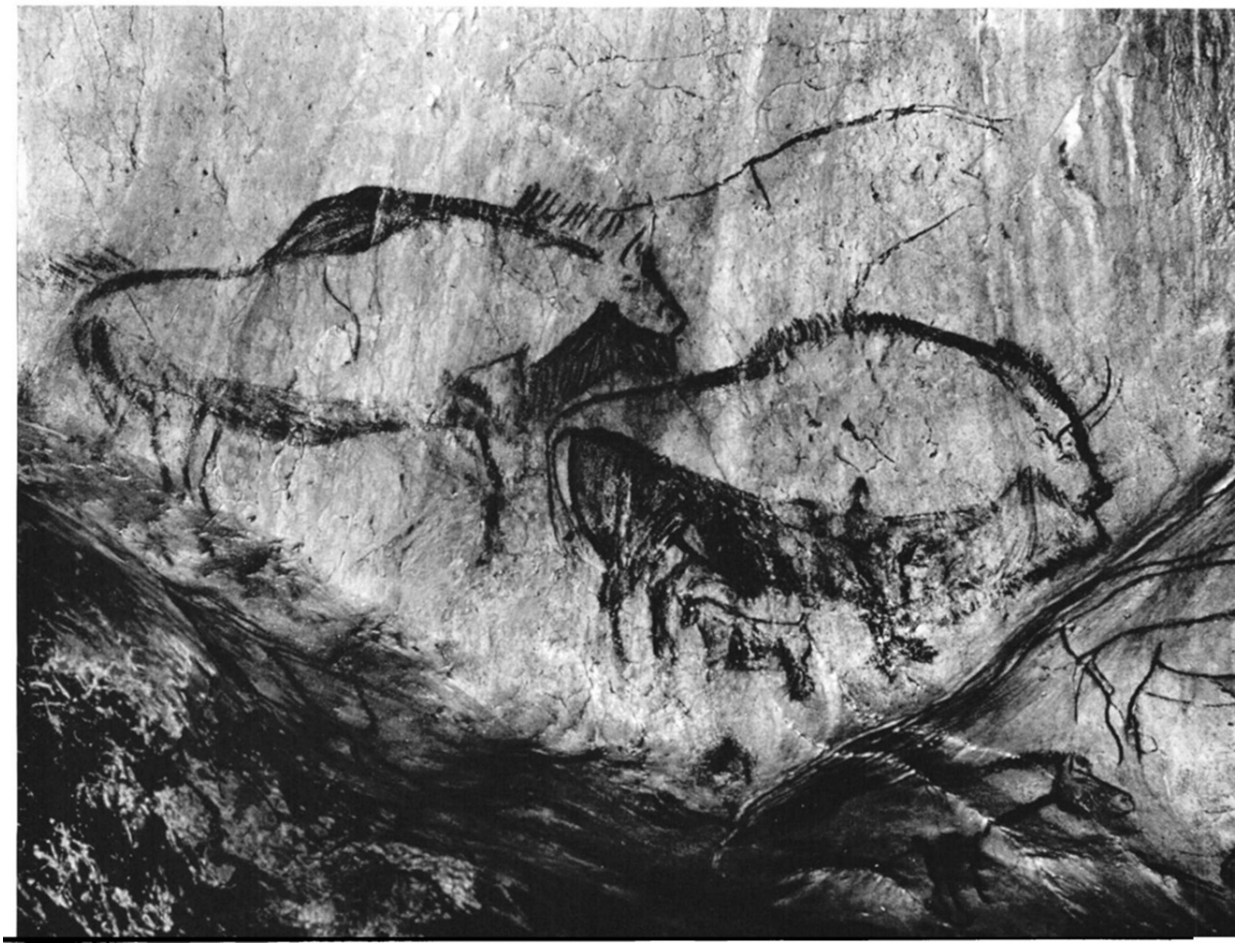
262. NIAUX: *Salon Noir. Large horse* (1.40 *m.*)

263. NIAUX: *Salon Noir. Niche at right, with bison and oxen*

The larger animals may be assigned to a period between the early Magdalenian animals of Lascaux and the later ones on the ceiling of Altamira. They are a product of the Magdalenian age in its full maturity, in complete command of the tools at its disposal. One is tempted to refer to this as the classical period of Magdalenian art.

264. NIAUX: *Salon Noir. Detail of bison hooves*

265. NIAUX: *Salon Noir. Bison in the center of the composition on the side of the domed ceiling*



266. NIAUX: *Salon Noir. Closer view, showing parts of bison tinted black*

COMPOSITIONS IN COLOR

It is not possible to consider primeval compositions as autonomous artistic entities, to which nothing could be added or taken away without destroying their organic unity. The notion that each work of art should be complete in itself became axiomatic only in classical Greece. The prototype for a work of art complete in itself is the pediment of the Parthenon, where a multifigured composition is enclosed within the cramped space of the long flattened triangle.

It was not in the nature of primeval art to accept such defined limits. There are therefore no autonomous compositions in the later sense of compositions subsisting within a clearly defined space. Primeval art is the manifestation of a potent symbol — an active energizing symbol—containing in itself perpetual powers of renewal. This explains the continued superimposition and interweaving of figures on the same places: such places would appear to have acquired throughout the ages particularly strong powers of emanation.

520 ff

Just as the primeval space conception was not organized in relation to the vertical and horizontal, so it contained no consciously autonomous compositions. Time was eternal. Certain aspects of these great compositions can be perceived which continued to live throughout the ages. In the circuit of paintings at Lascaux and Altamira, widely separated periods are linked together, also widely differentiated dimensions and proportions, without any one detracting from any other. The eternal present. It is impossible to confine this art within such rules as govern the composition of pediments. There is an interplay of unfettered movement. And yet the irrational space in which it has its being is far removed from chaos.

The principal paintings of Lascaux and Altamira supplement each other. Lascaux's almost oval main hall, surrounded by a broad band of rock whose crystalline sheath shimmers like newly fallen snow, seems as though predestined for great wall paintings. It gives a monumental impression of the early periods up to the middle Magdalenian, despite uncertainties in assigning a definite period for each individual item.

266 col, 263, 265 col

Altamira's ceiling was originally oppressively low: only a meter and a half from the ground. Its rock surface is rough and studded with large protuberances. Nevertheless, this surface, for reasons of which we know nothing, was chosen as the site for a masterpiece of primeval art. With its polychrome bison the ceiling displays a supreme mastery of all that the mature Magdalenian age could achieve in terms of color, line, form, and movement. There are certainly other places where polychrome paintings can be found: in the neighboring cavern, of El Castillo (Santander) or the Chapel of the Bison in the Font-de-Gaume cavern (Dordogne). But these consist of isolated specimens or are on a small scale. The overwhelming dramatic power of the Altamira ceiling remains unrivaled, unique.

Since Breuil published his monumental work on Altamira at the beginning of century (Cartailhac and Breuil, 1906), scarcely anyone has doubted the period to which these paintings should be assigned. They stem from the mature Magdalenian and complement in time those of Lascaux. They are unmistakably different from the earlier yellowish paintings of Altamira, which, in fact, they frequently cover. Indeed, their every stroke and splash of color openly reveal their period of origin.

264 col

If one observes the paintings of Lascaux and, without preconception, compares them to Altamira they appear at first sight strange, even stilted. Nowhere in the cavern of Lascaux, which was discovered only in 1940, can one find the supreme command of color and movement exemplified by the recumbent bison of Altamira. For this very reason the paintings of Lascaux arouse the utmost interest. They give insight into an unknown former period that had its own richness and which is here spread out before our eyes in almost inconceivable abundance. This former period still lies partly in shadow. Achievements such as Lascaux do not spring up suddenly of themselves. We have only an exceedingly fragmentary knowledge of the phases of painting leading up to the periods to which most of Lascaux is now assigned: the Solutrean and early Magdalenian. Only tentative conclusions can be drawn from comparisons with small fragments or *art mobilier*

THE PAINTINGS OF LASCAUX

When did these paintings appear?

As soon as this question is raised, differing opinions are voiced. Experts war with experts. This is another instance of our helplessness when faced with the discovery of a primeval work of art unlabeled by implements found within the same stratum. At Lascaux only a few Perigordian flints were found together with scanty relics of the Magdalenian age. These are of little help. At best they simply show that work continued at Lascaux — as in other caverns — through successive periods.

The view, first expressed by Breuil and supported by Peyrony and Lantier, that the Lascaux paintings should be assigned to an early period of art — in particular the Perigordian era — is now being challenged by some of the younger generation of French archaeologists.

Spanish scholars, in particular L. Pericot García, the excavator of El Parpallò cavern near Valencia, hold the opinion that most of the Lascaux paintings belong to the Solutrean and the first half of the Magdalenian periods. At El Parpallò, Pericot came upon a layer, nine meters deep, in which four different Solutrean and four Magdalenian strata could be distinguished. Such unusually differentiated Solutrean strata are exceedingly rare. Unfortunately, no large compositions nor even any complete paintings were found. Instead, there were some five thousand fragments, some engraved and

others painted. Many of these pieces are described in Pericot's meticulous publication (1942). In attempting to place the Lascaux paintings, these fragments cannot be left out of consideration, even while exercising all the caution that the distance between the two caverns imposes, for they give a rare insight into the different levels of Solutrean and Magdalenian culture and are, moreover, subject to reliable "dating" because of the implements found lying with them.

As already mentioned, some of the younger generation of French archaeologists assign Lascaux mainly to the Solutrean and the early part of the Magdalenian eras. A thorough analysis of the paintings of Lascaux has been made by an ethnologist, Elizabeth della Santa (1955, pp. 309–37). It is not necessary to concur with every detail of della Santa's researches in order to realize that her careful work has thrown doubt upon the earlier attribution of Lascaux to the Aurignacian-Perigordian era. She made studious comparisons with dateable objects of *art mobilier* and tracked down the incidence of iconographic peculiarities (sequences) and animals organized symmetrically, facing one another or in combat or pulling away from one another, all of which first appeared in Solutrean or Magdalenian times. However, della Santa is careful to avoid any precise attributions, which in her view would be premature at the present stage of research.

It is entirely possible that the tracings which the Abbé Glory has been making for years in the cavern of Lascaux may throw more light on the sequence of periods. But even when this is complete, because of the absence of many intermediate stages and the superimposition of paintings, Lascaux will require a great deal more detailed research before a time sequence can be firmly established.

Today it is possible to give only a rough outline of the probable age of the Lascaux paintings.

416

One thing seems certain: Lascaux is no exception. Like all important caverns, it does not belong only to a single period. This naturally formed sanctuary was a center of ritual observances for thousands of years, surviving through different periods of prehistory: from the Aurignacian-Perigordian era of the herd of small stags in the great hall, in between two gigantic bulls, to the pair of bison, juxtaposed tail to tail, which bear every mark of mature Magdalenian art.

There have been more publications of the art of Lascaux than of any other cavern (Windels, 1948; Breuil, 1952; Bataille, 1955; Laming, 1959). Only a few examples of the art from different periods are discussed here.

The gigantic bulls

410–11, right

Four colossal bulls, over five meters in length, completely dominate the great oval hall. They are white. In between them there live and flourish, unmenaced, an entire cosmos of

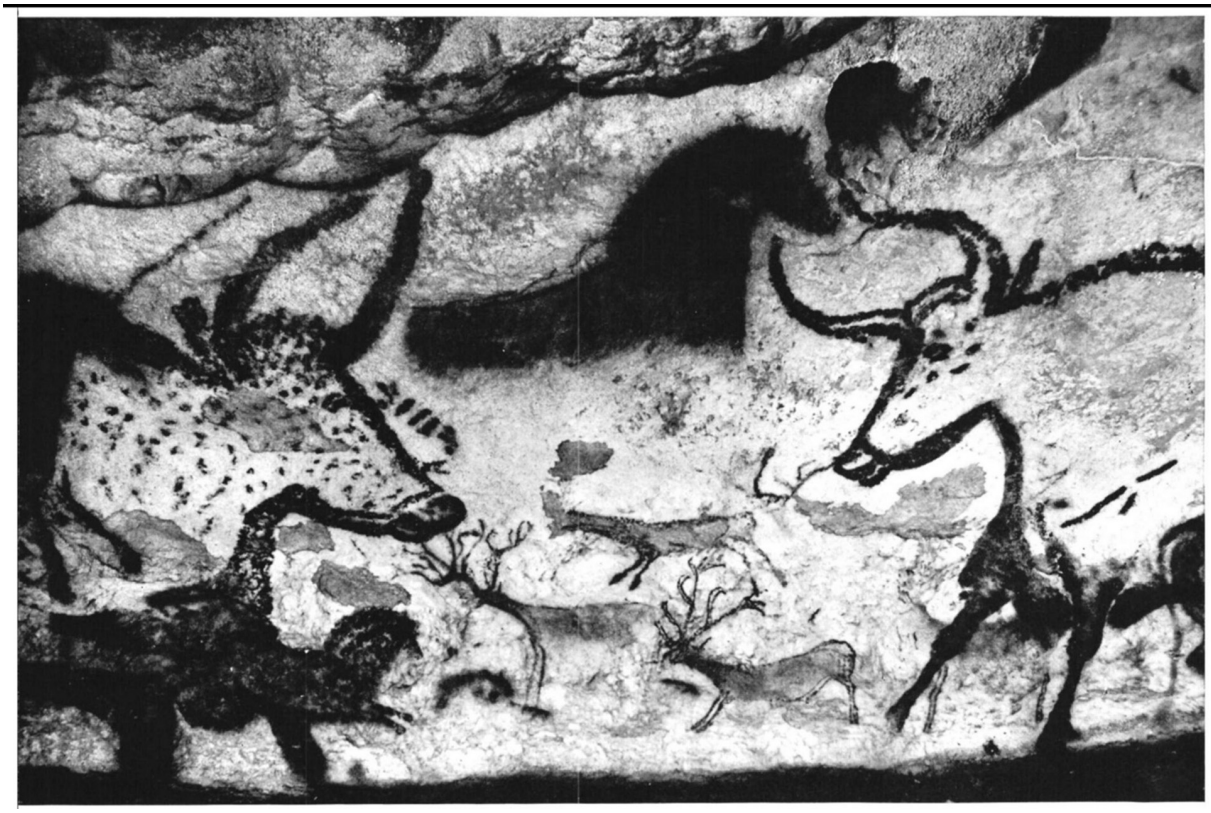
smaller and, in comparison with them, miniature animals. Some of these were made before them, some later. There is here an interplay of time and forms in which each creature is given a right to its own life within the total composition.

Though the legs of the bulls, sometimes their bellies, and the head of the finest of them are tinted with black, the animals themselves are white: a rare occurrence in primeval art. They are white like Apis, one of the bull-gods of the Egyptians. Symbols flutter all around them, sometimes alighting on their bodies.

These animal-gods seem to bear marks of long ages of veneration and worship. The fact that the heavy outlines of the bulls were painted over and around animals of earlier periods is as firmly established as that in later periods other animals were superimposed upon their bodies. In this connection, the enigmatic creature at the farthest left of the frieze cannot be overlooked. It has been called a unicorn on account of the two strokes above its head. The four bulls and this creature, its gravid body marked with ring-shaped symbols, imbue the domed hall of Lascaux with an awesomeness which never fails to impress even the most casual sightseer.

To what period can these bulls be assigned?

One has the choice of two widely separated ages of paleolithic art: the Perigordian or the late Magdalenian. Breuil attributes them to the Perigordian era, partly on account of the *perspective tordue* of their horns (1952, p. 149). On the other hand, H. Kühn assigns them to the late Magdalenian because "they no longer display the plasticity and freedom of outline that are characteristic of the mid-Magdalenian" (tr. 1956, p. 37).



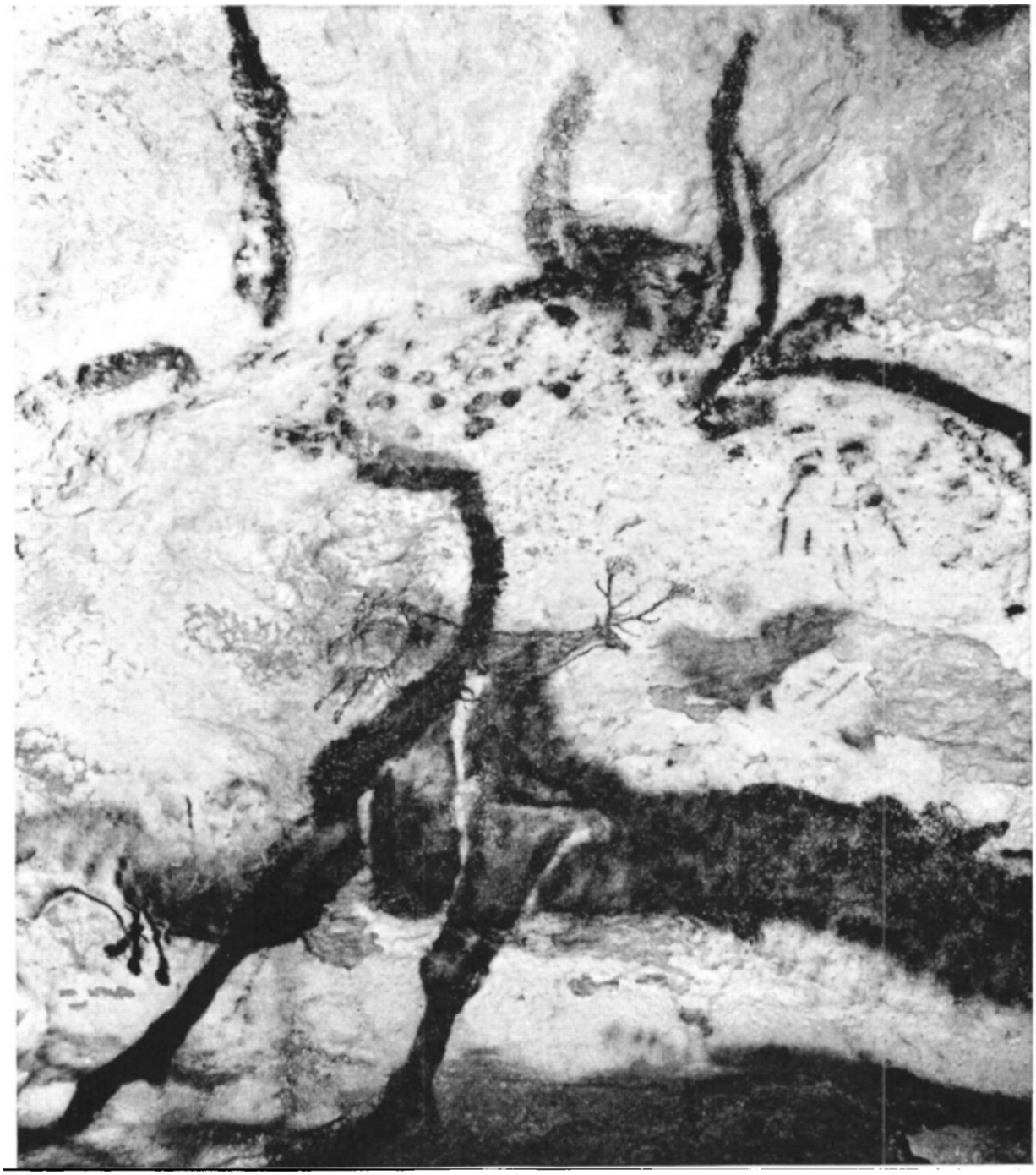
267. LASCAUX (*Dordogne*): *First and second bulls; between them a large brown horse, a small black pony, and small bister Aurignacian stags*

268. EL PARPALLÓ (*Valencia*): *Engraving of goat on stone. Drawing from Pericot García*, 1942

269

270

271



272

269–272. LASCAUX: *Heads of the four colossal white bulls in the great oval hall*

273. PECH-MERLE: *Chapel of the Mammoths. "Leaping" mammoth. With drawing*

274. LASCAUX: *Red "leaping" cow in the axial gallery. With drawing*

275. LASCAUX: *Left wall of the nave, with large black cow and smaller engraved horses behind*

Any attempt to establish their period by relating them to apparently comparative material is rendered difficult because of the enormous size and consequent simplification of the rendering of all the giant white bulls. But these bulls, as has been said, are both older and younger than many of the animal population painted over and around them.

298

They are younger than the herd of stags (*Cervus elaphus*) which appear between their heads. Though these are more finely developed than the *Cervus megaceros* of Pech-Merle, the incurved line of their backs and their spindlelike legs are signs of early Aurignacian-Perigordian art.

On the other hand, the bulls are older than the red and black horses that course over them. These already possess the vigorous bodies imbued with movement which are so typical of the Magdalenian period.

409, 411

To turn now to the outlines of the giant bulls themselves: the first two, which stand confronting one another, are transfixed in movement. If mastery of the outline can be taken as a sign of high development in primeval art, these bulls are still far below it, with the exception of a third much more differentiated bull, with a partly blackened head, which stands on the opposite side of the hall. The absence of a free-flowing outline can be noticed in the handling of the lines of their backs and their bellies as well as at the junctures of horn to neck, chin to throat, and legs to body. The legs, particularly in the case of the second bull, look like wooden stumps which have been screwed into place. They point to an early stage of art, though certainly not to its beginnings. No one would have dared to tackle such huge dimensions in the earliest periods of painting.

276 . LASCAUX: *Left wall of the nave, with two horses; a third horse is engraved within the one to the left*

409

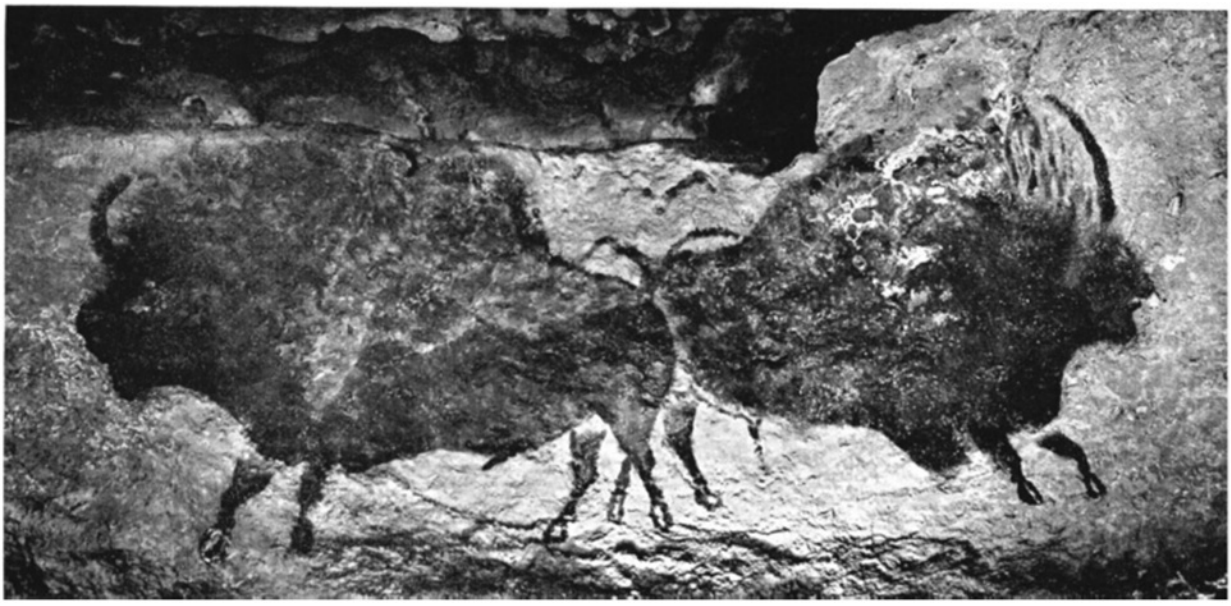
On one of the stone slabs excavated by Pericot in the cavern of El Parpallò he came upon an engraved plaque of a goat from the middle Solutrean period (1942, p. 167, fig. 177). Here one again finds the stiffly attached forelegs and the sharp angle between legs and body of the giant bulls of Lascaux. Probably these gigantic animals are from the Solutrean era. But in the absence of large Solutrean paintings there are no standards of comparison and without these a reliable basis for dating cannot be established.

The axial gallery and early Magdalenian art

264 col, 413

A compelling atmosphere of religious awe emanates from the great oval hall with the giant bulls. But, on descending the vaulted, tunnellike axial gallery, one seems to enter another world. Its basic elements remain the same as in the great hall, yet everything appears brighter, lighter, freer. Sometimes an almost dancing lightness is achieved, as in the movement of the famous "Chinese pony" on the right wall near the entrance. There is also a bold employment of space, instanced by a red cow (just beyond the "Chinese pony") which is apparently leaping across a chasm, from one side of the gallery to the other. These are signs which clearly point to a later phase than that of the giant bulls.

Color can now be applied and distributed with great refinement, and movement expressed in complete relaxation. Breuil himself, who divides the paintings of the great hall and the axial gallery into a series of fourteen chronological periods, places the "leaping" cow in a late phase (1952, pp. 111–22).



277. LASCAUX: *Left wall of the nave, with two polychrome bull bison juxtaposed tail to tail; Magdalenian*

413

The question is, when were these two representations made, which contribute so greatly to the general impression of movement and buoyancy? The yellow "Chinese pony" achieves a perfect consonance between the outline of back and belly and the attachment of its supple black legs. The knowledge of the use of different colors, as well as of the sparing use of color, is in keeping with the Magdalenian period. Its dark mane nicks into its brown neck in a manner very much like the black line drawing of the "horse pawing the ground" at Le Portel. The connecting zones between its yellow-colored hide and light-colored belly are not so subtly rendered as in the recumbent bison of Altamira, but are moving in the same direction. The little pony trots happily along without concern for the seemingly threatening symbols which surround it. Above it is poised a fourpronged instrument (an abstract hand?), and before it or upon it are other symbols of conjuration. The sign like a feathered arrow is almost certainly not a harpoon: it would be very early for this.

The great artistic freedom displayed by the "leaping" cow and the incorporation of the rock vault into the composition further indicate its date. Our photograph has been taken to bring out this utilization of the vault and the "leap" of the cow. One can see its outstretched forelegs and the partly destroyed line of its belly spanning the gallery from side to side.

264 col

Another illustration shows that this cow does not stand alone but with two others. The meeting together of their three bovine heads, with their tapering muzzles and curling horns, did not occur accidentally. A rare charm radiates from this conjuncture of forms: no symmetry but a related community of forms in free space. This kind of spatial

representation can be understood only in the context of the space conception of prehistory. But we are now primarily concerned with the question where and when similar representations appeared. *Art mobilier* cannot be of much help; only large-scale compositions.

412

The masterly black-outlined bison, mammoths, cattle, and horses in the Chapel of the Mammoths at Pech-Merle stop short at a shallow rock recess, on the left of the frieze: "une espèce d'alcove naturelle formée par le rocher" (Lemozi, 1929, p. 86). The vault of this alcove is spanned by a huge "leaping" mammoth in similar fashion to the "leaping" cow at Lascaux. The mammoth's trunk stretches along the rock ledge. Even today the place can be seen where the poet André Breton, doubting its authenticity, tried to rub away the color at the tip of the trunk, until he got a sharp rap on the knuckles from the guide (and later a legal action).

A "leap" is no more indicated here than at Lascaux. Optical "perspective" played no part in primeval art. Another vision reigned. Primeval man desired to fill out and utilize spaces, not to make representations of animals in naturalistic poses.

In this connection, reference may be made to another scene at the end of the axial gallery in Lascaux, which portrays a similar situation and likewise provides a pointer for the dating of these paintings: this is the "falling" horse (Graziosi, pl. 185b). All kinds of theories have been devised to account for its remarkable position: it has fallen into a trap or has been pushed over a cliff, like the tale of the "panic-stricken" horses at Solutré (Sâone-et-Loire), which is now generally recognized as fiction.

399

In the Chapel of the Mammoths is a "falling" cow below a mammoth "rearing itself upwards," which again expresses the different vision of prehistoric man who had none of our sense of organizing plane surfaces to relate to horizontal and vertical co-ordinates.

What matters here is that no representations of animals spanning vaults or vertically "falling" or "climbing," as in Lascaux or Pech-Merle, have yet been found in pre-Magdalenian iconography. But it should be added that the mastery of outline in the Chapel of the Mammoths would put it in a later phase of that period than the axial gallery of Lascaux.

The nave of Lascaux

Still another atmosphere reigns in the high gallery called the nave, which is connected with the main hall by a long passage. Here the colors are somber: black predominates.

414, 415

This part of the cavern is more sparsely painted than the axial corridor. Most of the paintings are on the left wall and arranged in groups. First a group of ibexes, horses,

and bison; farther on, approximately in the center, a large black cow (2.15 m.) which, like most of the animals in the nave, has an engraved outline. Its hooves are standing within mysterious polychrome symbols or large checkered ones. Its small head, heavy bulky body, and spindle legs form a curious ensemble. A second group of horses follows, one of which has a small horse of a later period engraved within it. To the best of my knowledge, the necessary comparative material is lacking for dating most of these strangely proportioned animals.

416

However, one group, a pair of bison at the end of the nave, betray Magdalenian characteristics. They are breaking apart from one another. This is rendered very effectively. Their hindquarters overlap, and their frantic effort to separate is emphasized by the position of their galloping forelegs, especially the straining forelegs of the older bull on the right, in which the joints are stressed. His mane is flying. Both animals are ithyphallic. Such psychic penetration did not occur before Magdalenian times.

261 col

The treatment of the deep brown coat of the left-hand bison is rather revealing. Here a large red patch has been inserted. This is not yet treated so abstractly as the blue-black bison in the Galerie Breuil at Le Portel, though it is certainly related to it.

377

The iconographic significance of the symmetrical arrangement of this pair of bison has been remarked: "The pair of bison with their hindquarters together undoubtedly form an intentional group. Contrary to other animals which are partly superimposed, these form a veritable symmetric composition: the silhouette. The manner in which the hind legs are shown crossed over one another; the manner in which the tails converge, each forming a circular arc; everything indicates that we are in the presence of one of those deliberate groupings of two animals, which made its first appearance in the Solutrean period" (della Santa, 1955, pp. 328–29). That first appearance was the relief of two confronting ibexes from the rock shelter of Le Roc de Sers.

The scene in the "well"

511

To the right of the main gallery is the so-called chamber of engravings. This is covered all over with superimposed lines and representations which have themselves been placed over earlier paintings. It is here that the Abbé Glory has been working, trying to disentangle this jungle of drawings. Because of this crowd of representations and marks of friction left upon the walls of this chamber, it is considered to have been the most used part of the cavern. In its floor is a pit, about six feet deep, commonly called the "well of Lascaux," which today is not accessible to ordinary visitors (maybe a sanctum

also in prehistoric times?). Near the bottom of it an unusual scene is painted: a wounded bison, a man with bird head, a bird on a pole, and, nearby, a rhinoceros turning its back to the whole scene. The meaning of this strange composition can be better treated in context with other figures of a hybrid character.

THE PAINTED CEILING OF ALTAMIRA

Altamira, the first painted cavern ever to be discovered, still holds its position of supremacy. No later discovery has obscured the brilliance of its artistic perfection. The frescoes on its great ceiling display an artistic achievement arrived at gradually throughout millenniums.

Altamira was first explored in 1875 by Marcelino de Sautuola (1831–88), who entered the cave not far from its original entrance, at that time blocked by debris. It was in 1879 that his little daughter Maria first noticed the bulls painted on the ceiling. Sautuola did not live to see the authenticity of the paintings proved. Only after recognition had been accorded to the rock engravings at La Mouthe in 1896, Pair-non-Pair in 1897, and Font-de-Gaume in 1901, was the time ripe for a reassessment of the professional repudiation of Altamira.

278. ALTAMIRA (*Santander*): *Shells containing variously colored ocher; from Magdalenian strata*

In 1902, Professor E. Cartailhac, from Toulouse, who had at first been among the skeptics, investigated the cavern of Altamira with his student the Abbé Breuil. The outcome was a magnificent monograph on every count, *La Caverne d' Altamira,* in which the hand of the young Breuil is manifest in the lines of every drawing. In 1935 appeared a second monograph, in English, by Breuil and H. Obermaier, who had in the interval carried out excavations in the cavern of Altamira.

The surroundings of the cavern are unimpressive. In contrast to most others, Altamira is not situated in mountainous country. Only a thin shell of rock covers the famous hall below. The disturbing wooden supports within the hall and the buttresses outside had to be erected to prevent the possibility of collapse, following dangerous cracks which had appeared as a result of local blasting operations.

Inadequate precedents

The paintings on the Altamira ceiling are very different from those at Lascaux, yet they continue the same tradition. The intermediate connecting links, however, are lacking. There is a contrast to the intensive use of every available space in the cavern of Lascaux. The cavern of Altamira slopes gradually downward into the earth. A few animals and tectiforms have been drawn on the clay-covered ceilings of its branching galleries, but all dramatic accent is concentrated upon one place only —the ceiling of the great hall.

It may be that, between the early phase at Lascaux and this stage of high perfection, intermediate phases exist, as yet undiscovered. At present we have very scanty fragments of Magdalenian art in full bloom, and these relics are in an incomparably bad condition: Font-de-Gaume, on the outskirts of Les Eyzies, and the cavern of El Castillo, not far from Altamira. In both of these, as at Altamira, the main subjects are bison.

265 col

The narrow cleftlike cavern of Font-de-Gaume (24 m. long) is exposed to continuous through currents of air and changes of temperature. Its paintings have for the most part perished or are difficult to recognize. In many instances we are obliged to rely upon the reconstructions published by Breuil, particularly for the frieze of animals high above the heads of the spectator, sixty-five meters from the entrance. This consists of "a whole series of polychrome bison surcharged in many places by small mammoths; these are more recent and very delicately engraved" (Breuil, 1952, p. 79). The average length of the individual animals is given as approximately a meter. As far as can be judged from the sparse remains and Breuil's drawings, the painting was in flat wash, often with decorative exaggerations almost verging upon abstraction. It might therefore be later in date than Altamira.

354

The so-called Chapel of the Bison at Font-de-Gaume is a small, arched recess, whose wall, as Breuil noted, had been rubbed with reddish ocher. It bears the vestiges of black, brown, and polychrome bison. Although it lies practically at the end of the cavern, its colors and forms have perished almost beyond recognition, so that it is necessary to refer to Breuil's reconstruction. Even so, it is possible to sense the breaking apart or loosening process of the final paintings of the Magdalenian period, as well as the capacity to create jewellike miniatures in the smallest possible space, such as can be seen in the engravings of the cavern at Le Gabillou. These paintings represent an epilogue rather than a prologue to Altamira.

A closer parallel to Altamira, both in form and technique, can be found in two recumbent bison in the cavern of El Castillo. Unfortunately they also are in a bad state of preservation, and in order to come closer to a recognition of their probable forms and to see the overpainted Aurignacian hands and animals beneath them, one is again obliged to turn to Breuil's reconstructions (1953, p. 362).

Thus Altamira stands alone: our solitary glimpse of Magdalenian painting in full flower.

The painted ceiling

267 col, 431

This ceiling, whose height originally dipped gradually from about two meters to little over one meter, displays, as so often, traces of the work of different epochs. In the lowest area Aurignacian-Perigordian vestiges can be made out, though they are badly faded; but they show through even in the main area of the rising ceiling and have sometimes been left undisturbed, at least in part; e.g., the gentle bison head, drawn with a broad yellow outline, which calls to mind the gigantic bulls of Lascaux. There are also some almost invisible anthropoid engravings as well as the great red symbols which straddle across the polychrome paintings.

424

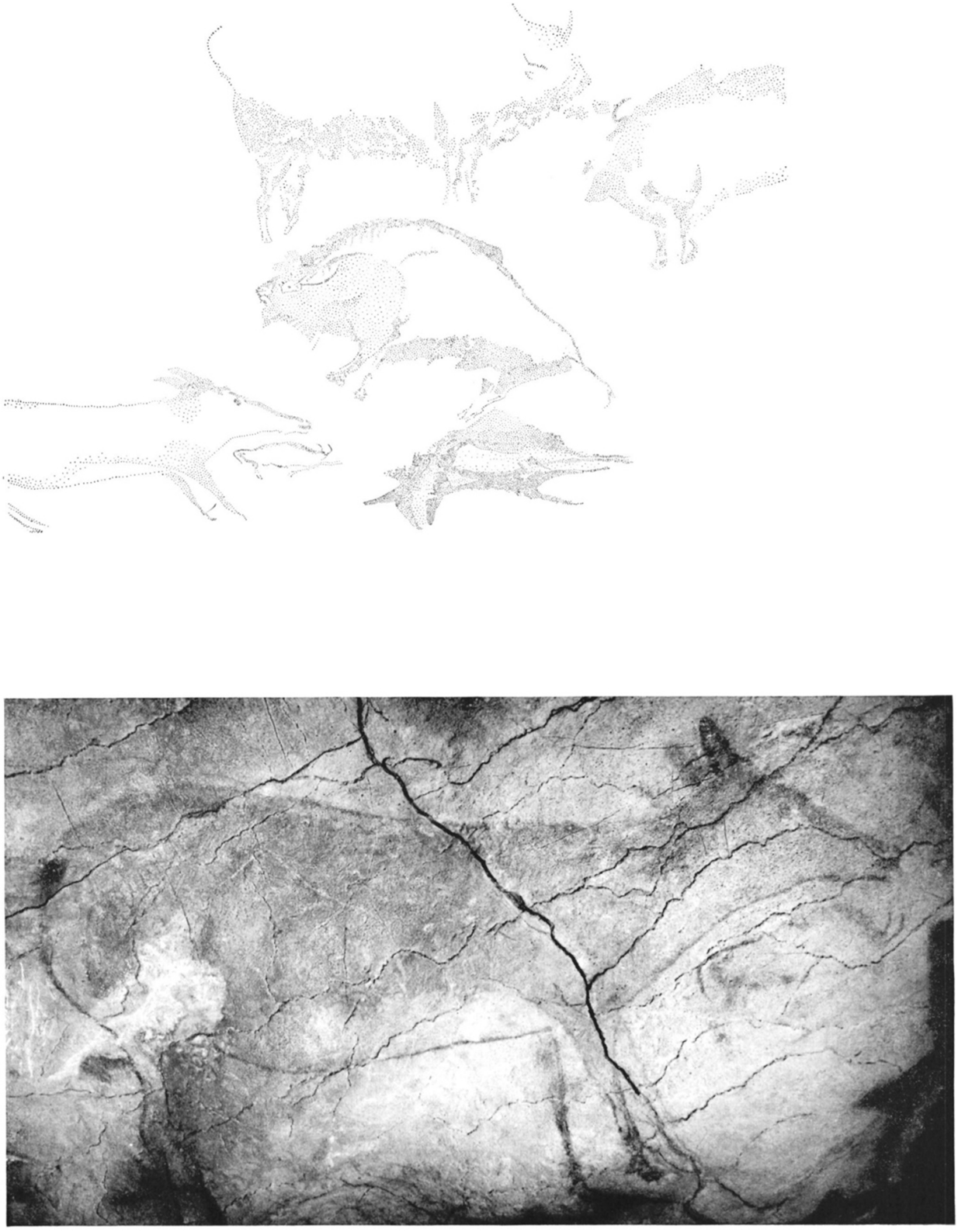
The great hind: On a first view of the ceiling one is aware only of the many large polychrome bison in the foreground. Then, in the background, one perceives the gigantic form of a hind (2.20 m.) —of larger dimensions than even the largest bison. Her body is dark red, her head much lighter. Around her is a zone of reverence, so called, in which are some red signs and anthropoid engravings. Except for a small (60 cm.) but boldly painted bison, she stands isolated from the other animals. The imperturbable calm, huge size, and separateness of this hind make her appear an idol: she is certainly not the wish-fulfillment picture of game to be slaughtered.

425, 267 col, 73

The bellowing bison: Above the hind, to the right, and at a respectful distance, is the most savage of all the animals on this ceiling: a bellowing bison (1.25 m.) in black and yellowish ocher. The brilliant red hind with her smoothly flowing outline was placed in juxtaposition to the livid ghoulishness of this enraged bison. The bison's head, with round encircled eyes and black muzzle, is thrust forward. Head and shoulder form one unbroken curve. His mane splays out on both sides, his bristles rise like the teeth of a band saw: a most unusual detail, which conveys the frenzied rage of the animal. This is strengthened still further by his powerfully arched back, which makes use of a deep fissure in the rock. The animal is caught at the moment of gathering himself for a spring, somewhat like the carving of a hyena from La Madeleine.

279. ALTAMIRA: *Unpainted outcropping from the ceiling. To the right, the great polychrome bison*

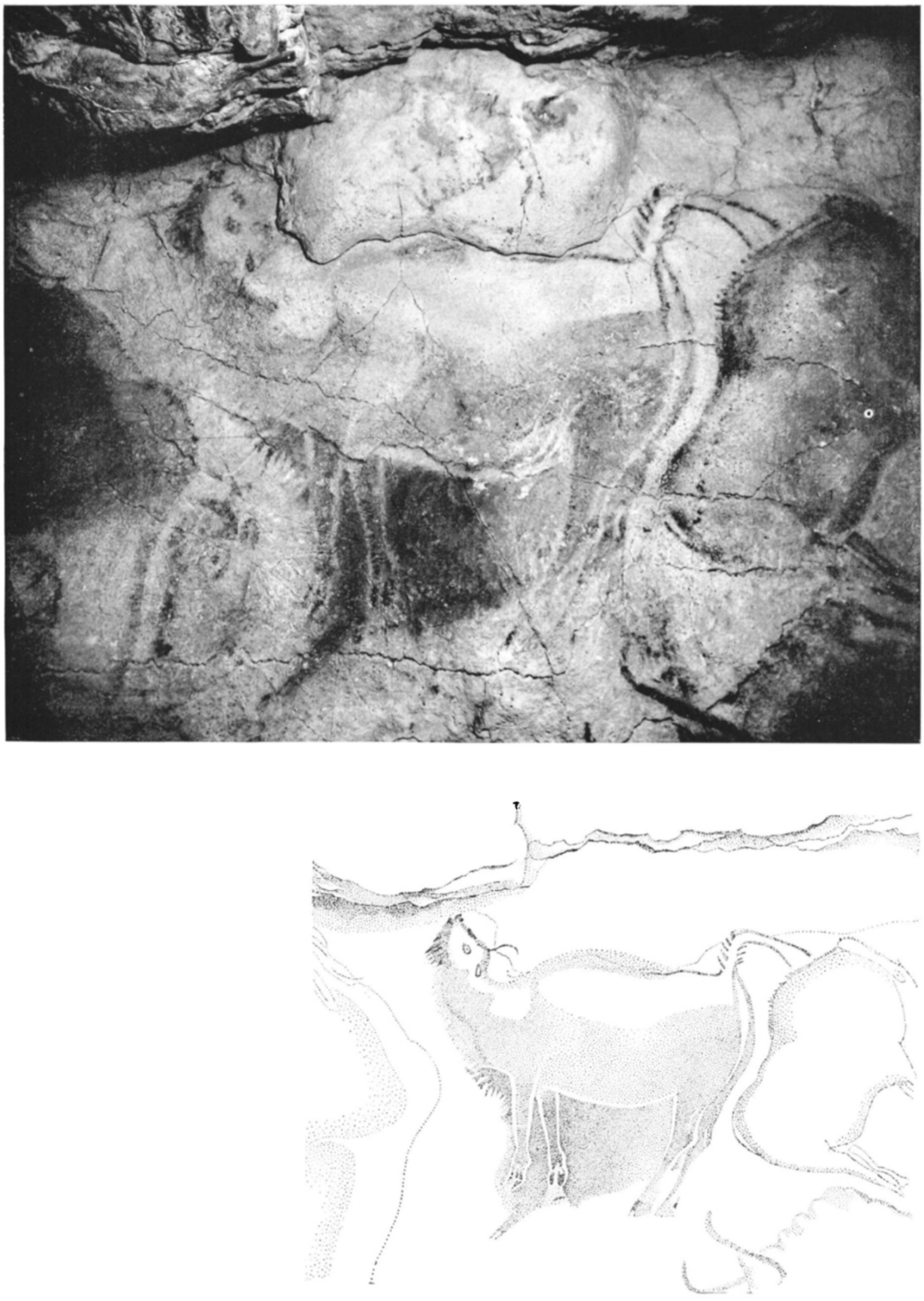
280. ALTAMIRA: *The steeply sloping ceiling. In the foreground, a polychrome bison painted on one of the outcroppings*



281. ALTAMIRA: *Below, the great hind* (*2.20 m.). Above, drawing showing also the bellowing bison, red symbol, and other animals on the ceiling* (*cf . col. pls. XV, XVI, p. 267*)

The great bison: Opposite the great hind, and at a seemly distance, stands an old bison. He is the most majestic of all animals on the ceiling, and the largest (2.05 m.) of the bison. His hind legs stand in a red symbol, as in a pool of blood. The massive weight of his body gives him a stolid tranquillity. His pointed, projecting beard, heavy shoulders, and hanging dewlap — which is doubly outlined and reaches far down between his forelegs—combine to emphasize the superiority of this animal. Understandably it has been assumed that he and the great hind play a special role in the total composition (Raphael, 1945, pp. 39–40).

282. ALTAMIRA: *Head and mane of the bellowing bison. With drawing*



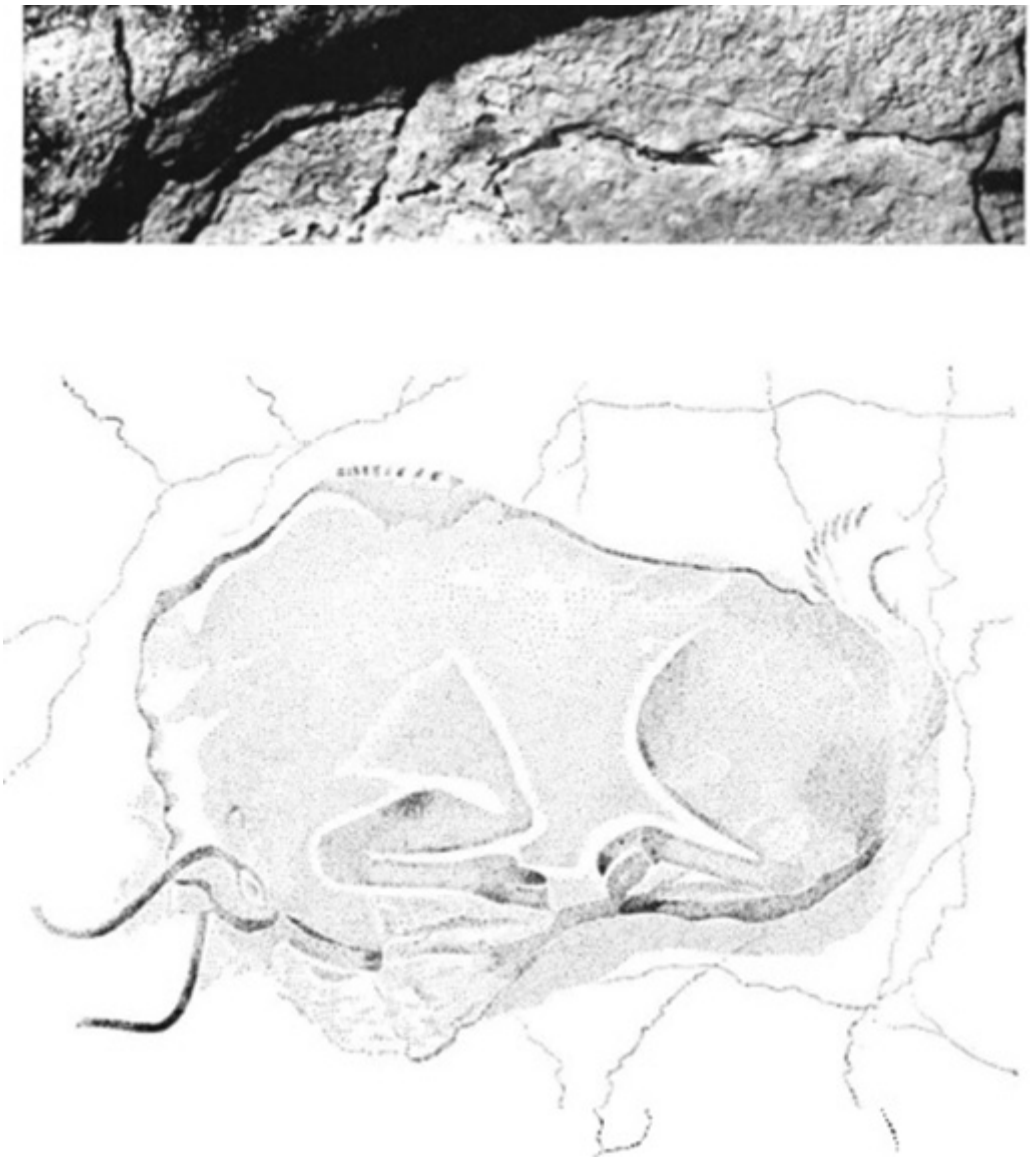
283. ALTAMIRA: *The bison with uplifted head. With drawing*

left

The bison with uplifted head: The entire posture of this animal has been determined by the configurations of the rock. This bison also has its head upraised to bellow, a position suggested by rough irregularities in the surface of the ceiling, which even necessitated a certain degree of distortion. Both the uplifted head and line of the back are formed by a fine crack in the rock. The addition of some tawny color and a few engraved lines have simply strengthened the form that was already there.

In their second monograph on Altamira, Breuil and Obermaier reproduce tracings of the engraved lines on the most important animals, and the strokes forming the outline of this bison as well as the organization of the planes of his body are especially revealing (1935, p. 33).

This bellowing bison is hemmed in by two polychrome bison. Below the figure to the left are the yellowish vestiges of a large Aurignacian bison head. The remarkable gentleness emanating from its form and expression suggests the tenor of the figures on the ceiling in earlier times.



284. ALTAMIRA: *Hindquarters of recumbent bison with raised tail. With drawing of the entire animal*

266 col, rt.

The recumbent bison: The outstanding expression of artistic strength appears in the curled-up figures of recumbent bison — neither falling nor dead, but perhaps giving birth — whose forms are determined entirely by protuberant rock shapes. These are evidence of the power of the Magdalenian artist to recognize life slumbering in chance outcrops of rock and to give it form. To our eyes the unpainted protuberances are simply formless knobs of rock. Magdalenian men perceived them differently. At this time, when their artistic powers were at their height, they achieved an indivisible unity in their imaginative approach to forms existing in nature, sculpture, engraving, line drawings, and color.

363

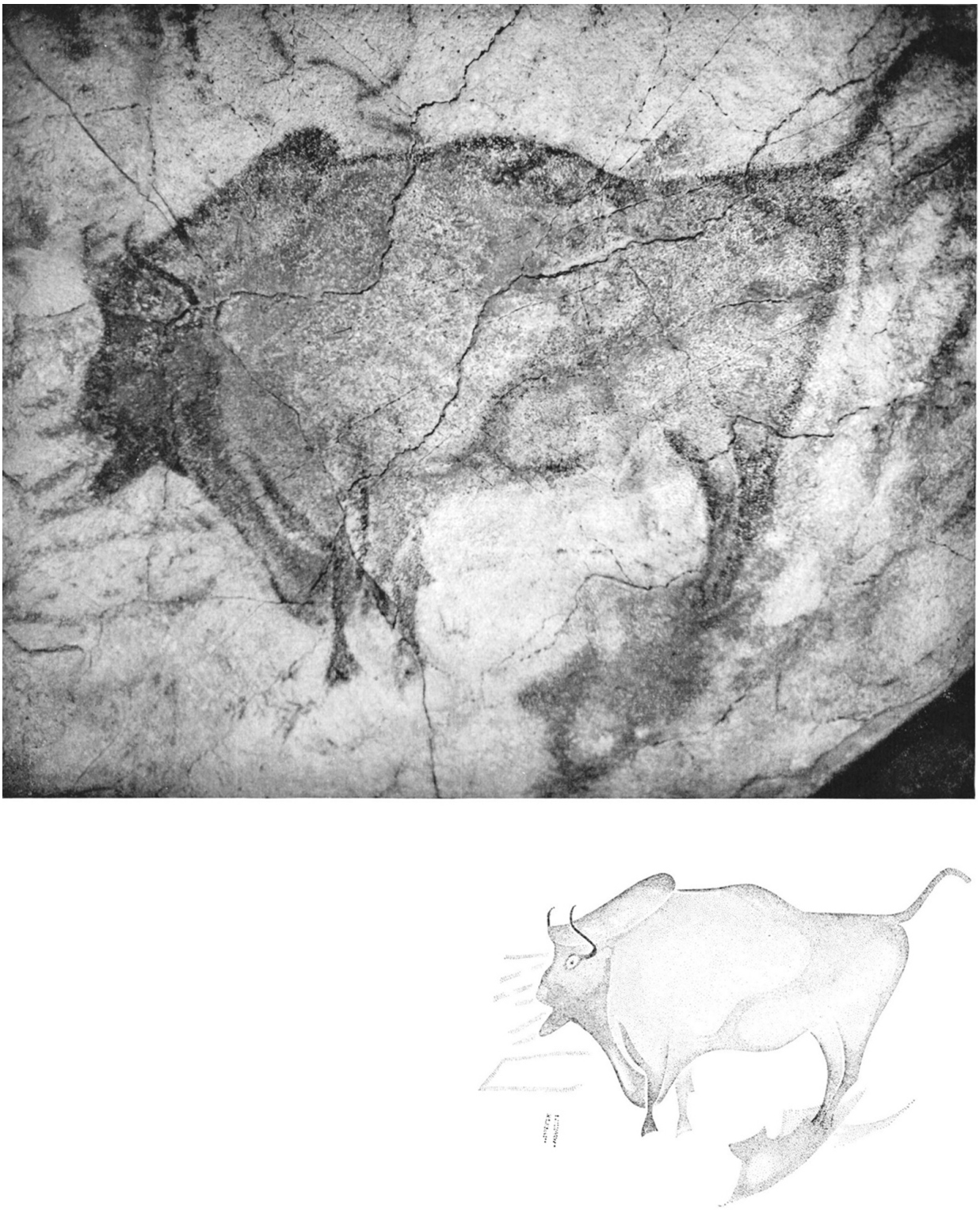
Such a state of perfection could not be accepted as a matter of course even at this period of prehistory, and a comparison of one of these recumbent bison with the bison from Font-de-Gaume, surrounded by engraved tectiforms, shows the great differences which could appear, even when similar principles of work were involved. The Font-de-Gaume bison is a large animal and one of the few that is even moderately well preserved. As in Altamira, the natural structure of the rock was exploited to the utmost. The point of departure was the line of the back — indeed, this could almost be termed a principle. This line had been predetermined, throughout its whole length, by a long crevasse in the rock face. To a certain extent this was true also of the head and neck, but the artist at Font-de-Gaume was unable to free himself enough from what lay to hand to transform it into a really significant form. Whether this difference was caused by a lapse of time between the two paintings or whether it was due to the exceptionally gifted artists working at Altamira, we cannot know.

Very little was added to the rock protuberances at Altamira to bring the recumbent bison into being: details of the head, the back, horns, tail, and legs.

These few figures from the wealth of material on the ceiling of Altamira stress the essential features of this most mature phase of Magdalenian painting.

Techniques and simplification

To sum up, it must again be emphasized that the ceiling of Altamira represents the highest attainment of prehistoric painting. From a purely technical angle it shows that such concentrated forms were achieved only through a combination of all known means of expression: paint was applied with a brush or by blowing, or it was rubbed over the surface, and flints were employed as engraving tools. The methods used were elaborate and complicated. The aim was not simply to create a naturalistic effect. The spectator was always held off sufficiently to demand his attentive interest. An almost sophisticated combination of the various means of expression had the effect of transforming a bewildering complexity of reality into consummate simplicity.



285. ALTAMIRA: *The great bison and red symbol. With drawing*

Allowing for all differences in intention, curiously similar methods are being used at the present day to increase the intensity of forms.

The word *constancy* I take to mean not merely uninterrupted continuity but rather a quality of the human spirit which enables things to lie dormant for long periods of time and then suddenly to reawake to new life. This quality remains unaffected by "new

discoveries" : the spiral convolutions of the human mind cannot be documented one by one.

Boldness in extreme old age is something very few have been granted: Titian, Rembrandt, Cézanne, and, in recent years, Henri Matisse. During the last four years — 1950 to 1954 — of his long life Matisse surpassed himself. He ceased painting. With scissors he cut colored paper into pieces that he then rearranged and mounted: *gouaches découpées.* Their dominant color was blue. These shapes of colored paper appealed to Henri Matisse as the most direct means of using the hand to transfer expression: *la taille directe.* Under the hand of Matisse these paper cuts took on monumental dimensions. Their full intensity came to light when they were used as murals: a whole background of tremendous artistic experience had been put in the service of a monumental simplicity. This became very clear when, on entering the Bern Art Gallery in 1959, one saw these monumental collages all together for the first time. To emphasize the different forms used to build up a composition, the aged master separated them by the narrowest of intervals instead of using an outline.

This brings us back to the recumbent bison of Altamira. At the thighs, a narrow band of the natural rock was left unpainted in order to intensify the separation of the red and black areas.

The use of color

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The vivid use of color at Altamira becomes all the more astonishing when one realizes the limited range of pigments available in prehistory. There were ochers of red, brown, and a yellowish hue and a blue-black manganese oxide. These were all found within the caverns. At times charcoal was also used. These colors are practically imperishable. Before being applied to the rock walls they were mixed with some binding medium: animal fat, fish glue, or blood.

This range of pigments persisted unchanged throughout the whole of prehistory. Red had the strongest symbolic content: its relations with blood and thus with life are obvious. But it is a long road from smearing the dead with red ocher in order to insure their well being to the sublime polychromy of Altamira. Lumps of ocher were found in the cavern beside powdered pigments in shells, just as they had been left.

286. ALTAMIRA: *Outline in bister of large Aurignacian bison head*

On the significance of the ceiling

The dramatic power of this ceiling is so overwhelming that it induces an immediate sense of awe, and the question of its meaning and intention cannot fail to arise. Maringer saw the great hall as a tribal sanctuary (1960, p. 120). Raphael went much further. He analyzed the ceiling as the scene of a "magic battle" and saw the confronting figures of

the great hind and the great bison as representatives of two warring clans who fought each other in the semblance of these animals: one tribe with the hind as its totem, the other with the bison (1945, pp. 38ff.) . This is going too far. There is no proof of the existence of clans in Magdalenian times, and any representation of warring tribes seems most improbable. The first representations of fighting between man and man appeared in the late mesolithic times — in the Gasulla gorge in Castellón, eastern Spain.

Yet some of Raphael's remarks cannot be lightly dismissed: in particular, his references to the unmistakably prominent positions occupied by the two largest animals — the hind and the old bison. The peculiar juxtaposition of these animals comes out in all of the general views of the ceiling prepared by Breuil for the first monograph on Altamira (1906) and published in color almost half a century later in his great compendium of primeval art (1952, pp. 54–55). The red symbols in the zones of reverence surrounding these figures are most conspicuous.

The emphasis accorded to these two figures on account of their large size, their position, and the idol-like quality of their representation adds greatly to the impressive power of the ceiling as a totality. None of the animals at Altamira are menaced by flying arrows. The whole ceiling seems to furnish more evidence of the predominance of fertility rites, and the association of animals and symbols bears out this contention.

The mystery enshrined in these frescoes cannot be disclosed in every detail. To a great extent they themselves declare what they represent: an apotheosis of reverence for the animal world, raised to a level never before achieved and orchestrated with all the richness of a long artistic tradition and experience.

PART V

THE HUMAN FIGURE

In his *Symbolik und Mythologie*, F. Creuzer states: "The human figure was regarded as the ultimate form. By stripping all that was superfluous and individual from this noblest of all bodies, art finally reached the point of expressing its inherent divinity. This supreme purification of the human figure was described by Winckelmann as follows: 'These idealized figures [of the Greek gods] are like an ethereal spirit purified by fire'" (Creuzer, 1810–12, I, pp. 172–73).

The Egyptians observed the harmony of the youthful human body and saw in it a symbol of the eternally recurring bloom of youth. That is why in their tomb statues the figures appear in all their radiant youth no matter at what age they may have died. But, as Creuzer says, it was only with the Greeks that the human form was used as a means of "expressing its inherent divinity."

No such notions are relevant to primeval art. The human figure appeared but sporadically: usually naked; the face veiled; the head sometimes lacking altogether, sometimes bent forward like an animal's, or, most usually, depicted as the head of an animal.

In the zoomorphic period the figure of the human being appeared negligible in comparison with the beauty and strength of animal figures. This unequal relationship can be observed in the scanty representations of human beings left by prehistoric man. The self-adulation with which both male and female nudes were presented in the sunlight of Greek sculpture is totally unimaginable for primeval man.

It is highly doubtful whether in primeval art the human body as such played an important role. In the main, it was employed as a means of depicting certain aims. In the so-called Venus figurines of the Aurignacian-Perigordian period, all parts of the body not directly related to the aim — fertility — were either deliberately treated negligently or omitted altogether. Yet the female figure is not handled as mere scaffolding. In most instances it is developed with considerable craftsmanship into a work of art. The two most significant primeval female reliefs, the Venus of Laussel and the pair of reclining figures in the cavern of La Magdeleine (Tarn), display a highly developed sculptural knowledge. There is no weakness in the primeval artist's powers of observation or in his performance. But there was no concept of the human figure as the highest form of beauty.

The face, later to become the supreme vehicle of human expression, did not exist at all —or was devoid of all expression.

A way of distinguishing types of Venus figurines must be established before an account can be given of the two reliefs already mentioned. Also, one cannot completely overlook the category of the headless human figure, as it appeared in the Magdalenian era, nor, finally, those hybrid beings, man-animal or animalman: the masked being, the

demon, and the shaman or sorcerer in which animal and man were often inextricably blended.

Sculpture in relief and in the round

First, to avoid misunderstandings in nomenclature, a few comments on sculpture in relief and in the round. A sharp distinction must be made between the two.

Sculpture in the round is placed freely in space, unattached to any background.

Sculpture in relief is always attached: always a part of something else. A relief, like a climbing plant, seeks support. It is a part of its background, whatever this background may be: the rock wall of a cavern or man-made architecture. A relief is never separated from the natural or the man-made surface. It expressed — at least in prehistoric times —the inseparable oneness of all that exists. Primeval art seldom attained greater heights than in its reliefs.

It is quite otherwise with sculpture in the round, sculpture which stands freely in space. This can be placed in relation to other sculptures or to a building, or it can, just as well, stand free and unrelated. It expresses a separation of the object from its basic parent material.

Sculpture in the round rose to its highest development only after man had severed himself from the animal world and the isolation of man as an individual had advanced to a stage never attained before: in classical Greece. In Egypt, statues remained attached to their parent block until the very end. Even when they acquired colossal dimensions during the New Kingdom, they never stepped forward from the walls of the temples.

514

Sculpture in the round was unknown in prehistory. It would have belied that inseparable oneness of the world expressed in every aspect of primeval art. This is developed in our section on the conception of space in primeval art.

188

Though some things may appear like sculpture in the round —such as the dummy of a bear with interchangeable heads in the cavern of Montespan (Haute-Garonne) — they have in fact nothing whatever to do with it. In this instance, it was a sort of scaffolding over which a bearskin could be draped to represent the objective of the hunting rites. The head of an animal-demon from La Ferrassie (Dordogne), which might also be considered in this context, had never formed part of a free-standing sculpture. It was a fragmentary object related to rites connected with head cults and fertility cults.

440

The miniature female figures, which range from under three to twenty-two centimeters in size, cannot be compared with immobile free-standing sculptures. These

small carvings were cult objects made to be held in the hand. They had no bases, though, when the figures were not too small, it is thought that their close-pressed legs and feet ending in a point might sometimes be stuck upright in the ground, as seems to have been the case with such objects found in the excavations of some prehistoric Russian dwellings. But they were certainly not suitable for use as altar figures.

In reference to the Aurignacian-Perigordian figurines, Herbert Read, in the Mellon Lectures for 1954, suggested that sculpture found its starting point in the amulet. Sculpture is tactile, and it is fulfilled to a high degree in the Venus figurines. Their qualities could be intimately felt by the hands, far better than in a large, free-standing sculptured figure. He speaks in this connection of "the manageable dimensions and direct tactility of the amulet" (1956, p. 24).

Certainly the idea of a sculpture absolutely freed from any background is given full expression in the Venus figurines. But this is all. Between the disappearance of these small statuettes, at the end of the Aurignacian-Perigordian period, and the appearance of the Greek free-standing statues, there is a lapse of some twenty millenniums. Greek sculpture developed from a totally different and entirely new basis of thought. Read notes that "there was, however, a time lag between the conception of a free-standing statue and the discovery of an aesthetics appropriate to such sculpture" (p. 60) . Yet, although the rise of large-scale sculpture in the round, whose response is rather to the eye than the hand, was due to a totally different aesthetic approach, and indeed had quite a different artistic significance, a notion of sculpture in the round did first spring to light in the little Venus figurines.

VENUS FIGURINES

Relatively few of the Aurignacian-Perigordian Venus figurines were found in well-stratified sites. This fact has given rise to much doubt and controversy, which is particularly regrettable, as it reflects upon some of the finest of them.

441, **444**

As a possible typological basis one can distinguish two main groups: in the first, the profile predominates (prototype, the Savignano Venus); in the second, the full-face frontal view (prototype, the Lespugue Venus.)

In effect, it is somewhat artificial to catalogue the Venus figurines under these two heads, since they are sculptures in the round. In prehistory, when almost all representations grew directly out from the rock, these figurines are strangely exceptional. They are understandable only when it is realized that most of the figures are but a few centimeters in length and so could be held in the hand. In the case of the unusually large (22 cm.) and probably late Venus of Savignano, it can immediately be felt how the figurine fits perfectly the clasping hand.

The Venus figurines were sculptures in the round in miniature. They were intended to be regarded not from one side only but from all sides. When, in spite of this, they are divided into two types, profile and frontal, this is only to bring out the most effective aspect of their plastic treatment. In addition, it becomes apparent that both types persisted for thousands of years. The figures varied but the types lived on, until they were extinguished with the advent of the anthropomorphic pantheon.

There is an eastern type in which all aspects are conceived plastically, in the round in the fullest sense. Few of these figurines exist. The most famous is the Willendorf Venus (Austria), found in 1908 in a late Aurignacian stratum and reproduced in almost every history of art (della Santa, 1947, no. 121) . This is the most fully plastic of all prehistoric figurines. Its squat proportions and absence of neck appear rather strange at this period, but the overripeness of this figure achieves its purpose with undeniable strength.

In the figurines from Dolní Věstonice, Czechoslovakia (della Santa, no. 123), which is about the same size as the Willendorf Venus, belly and buttocks are less exaggerated. This is also true of the (5.8 cm.) *femme obèse* from Gagarino, in the Ukraine (no. 125).

446

After the Aurignacian-Perigordian period there came a change from the heavy statuettes with their earth-mother quality to a Magdalenian type of almost fleshless

figure, such as the so-called Vibraye Venus from Laugerie Basse (Dordogne).

One thing was common to all the Aurignacian-Perigordian representations, though the treatment varied: an overemphasis of the pelvic region, the most significant part of the body. E. della Santa has given the most scrupulous specification of these figurines.

In the profile type the fleshy parts of the body were made to bulge out backwards, so as to give the silhouette the strongest possible emphasis. This characteristic silhouette is the distinguishing feature of this type. It was Edouard Piette (to whom we owe so many valuable finds at Brassempouy and Mas d'Azil) who first used the term "steatopygous," describing men or women with protruding buttocks on account of disease or race. He related this to the appearance of certain African races, such as the Bushmen and Pygmies, and he suggested that the trait threw some light on the appearance of the Aurignacian people.

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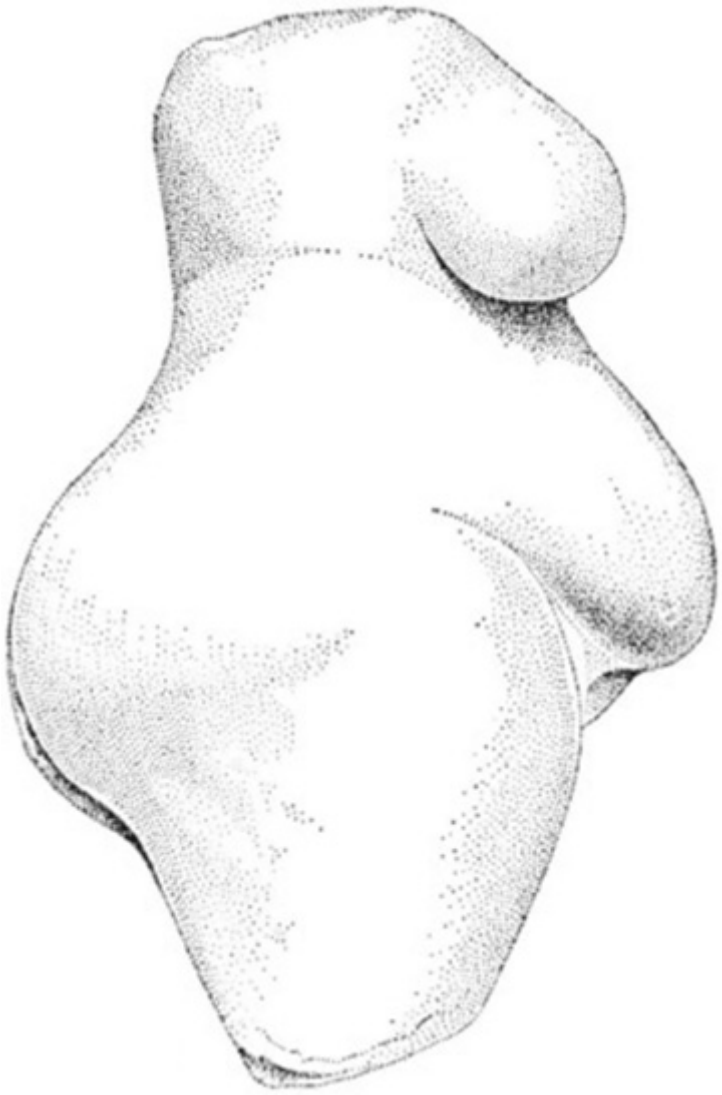
In the frontal type the fleshy areas are spread out sideways. In her book on *Les Vénus stéotopygues*, L. Passemard disagreed with Piette on the basis that "these celebrated statuettes called steatopygous are almost all platypygous" (1938, p. 132). In other words, they suffered from an excess of fatty flesh at the sides of their hips, not at the back. It has long been realized, however, that these Venus figurines cannot be employed to study aspects of disease or of race. They represent different artistic means of giving form to the same kind of idol, in a cult that extended in this early period from southern France across to Siberia. The frontal type with its spreading pelvic area persisted longer than the profile type. In a more abstract form it is found in idols from the Middle East and Egypt around 3000 B.C. and from the Cycladic Islands around 2000 B.C.

THE PROFILE TYPE OF VENUS FIGURINES

La Poire, Brassempouy

right

The outline of the profile type shows the body in silhouette. The first Aurignacian-Perigordian female figurine was found in 1872 at Brassempouy (Landes), in a state of only partial preservation. This little figure (8 cm.), now well restored in the museum at St-Germain-en-Laye, is singularly graceful, although only her hips, belly, and right thigh have survived. Her ripe youthfulness has no parallel throughout the Aurignacian-Perigordian era. Her breasts, pelvic area, and gently curved belly have almost the same kind of plastic beauty as a Maillol statue. They show that, if the paleolithic artist so desired, he was well able to give lifelike form to the human figure.



Profile types of Venus figurines:
287. BRASSEMPOUY (*Landes): "La Poire," ivory (8 cm.). Drawing*

288. TURSAC (*Dordogne*): *Outline of Venus discovered in 1959, superimposed on that of the Sireuil Venus. Drawing from Delporte, 1960*

289. SIREUIL (*Dordogne*): *The damaged Venus*, *calcite* (*9 .2 cm.*)

La Polichinelle, Grimaldi

below

Among the figurines found in the caverns of Grimaldi, near Menton, in the early nineties, was a small (4.7 cm.) statuette of vitreous rock, now at St-Germain-en-Laye. It is astounding that so dramatic an outline could be achieved within these miniature dimensions. If one observes the tiny figure frontally, its form appears tall and slender with long tapering legs. When turned in profile, the buttocks project sharply at right angles to the figure. The belly, whose beaklike form is completely unnaturalistic, completes the dominance of the profile view. The head, which, as usual, is veiled, ends as a peaked hood, the meaning of which is still obscure. The high perfection of the flowing outline of this sculpture would seem to indicate that the figure belongs to the

final rather than the middle period of Aurignacian-Perigordian development. This figurine enables one to realize why one of the most talented sculptors of the present time worked for years upon a head of miniature size. Alberto Giacometti felt that, within this dimension, the smallest affront to the purity of its form would be immediately exposed.

290. GRIMALDI (*Menton*): *Profile type of figurine, "La Polichinelle"* (4.7 *cm.*)

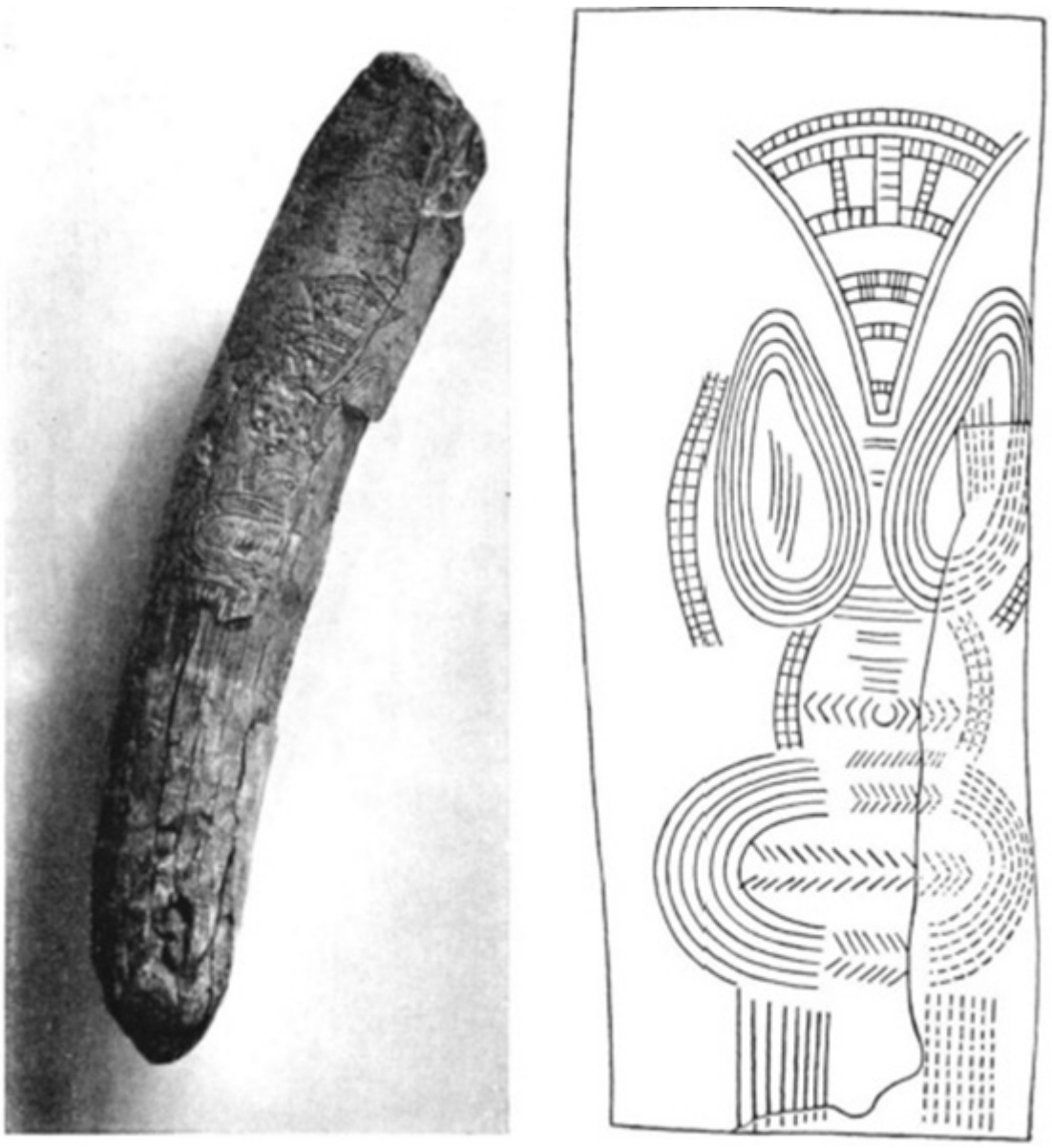
The Grimaldi figurine — so-called "La Polichinelle" — was found by a day laborer, and it is not known from which stratum it came. Even its attribution to the Grimaldi

caverns is not certain. But no possible doubt can exist regarding its quality.

Observers were immediately struck by the remarkable profile of this figurine, and the descriptions state unflinchingly that its form arose because the piece of vitreous rock from which it was carved was too narrow to permit the hips any lateral breadth.

291. SAVIGNANO (*Modena*): *Profile type of figurine, serpentine* (*22 cm.*)

292. PETERSFELS (*Baden*): *Profile type of abstract figurine, lignite* (4 *cm.*) . *Drawing after Peters, 1930*



293. PŘEDMOSTÍ (*Moravia*): *Abstract frontal type of female figure engraved on a mammoth tusk* (*15.5 cm.*). *With drawing* (*as if object were rolled out flat*) *from Obermaier*, *1924*

The Savignano Venus

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In the instance of the Venus from Savignano (Modena)—the largest of these figurines (22 cm .)—no such apparent reason for its protuberant profile could be given. This figure was found in 1925 by a workman during some building operations. It was lying three feet underground, unaccompanied by any flint tools that might have established its period. It was later presented to the Museo Preistorico in Rome by the sculptor Giuseppe Graziosi, father of the prehistorian (Graziosi, tr. 1960, pp. 51–52).

This figurine, carved from greenish serpentine, is in a state of complete preservation: it is a perfect profile type. Its delicate modeling fits as sweetly into the contours of the hand as one of the beautifully made Aurignacian *points.* Its outline glides wavelike from

the tip of the hooded head, over the back and buttocks, to the end of the tapered legs. The torso is handled with the same plastic sensitivity, particularly where limbs and belly meet: a flowing connection of the accentuated sexual triangle with the molding of the thighs.

Like the Grimaldi figure (La Polichinelle), the Savignano Venus has been placed in the final phase of the Aurignacian-Perigordian cycle. Certain refinements in its working might make even a later dating possible.

The Venuses of Sireuil and Tursac

439

The well-known figurine from Sireuil (Dordogne) also falls into this category. It was found, much damaged, in 1930, and, like the others, it cannot be dated. The figure is certainly cruder and not so exquisitely modeled.

439

In 1959, a polished Venus figurine was discovered in a well-defined upper Perigordian stratum. The rock shelter where it was found is near Tursac (Dordogne), which lies only a few kilometers from the site of the Sireuil Venus.

"The close relationship which exists between the statuettes of Tursac and Sireuil especially concerning their lower limbs" (Delporte, 1960, p. 242) was so striking that the excavators superimposed drawings of the outlines of the two figures. Thanks to the definition of the stratum in which the Tursac figurine was found, it is possible to come closer to a date for the Venus of Sireuil.

The Tursac figurine is without arms, breasts, or head, and there is another matter which causes some perplexity: "a sort of flattened stalk, elliptical in section . . . inserted between the belly, legs, and feet" (p. 243). This certainly does not represent childbirth, as has been suggested. The Venus of Tursac is more nearly related to the androgynous figures, whose exact meaning is still obscure.

A stone figure (15 cm.) from Kostienki (Ukraine), found in 1932, comes from a very different environment. The profile type survives only in outline. Its plastic treatment is crude: "Its modeling gives the appearance of a first study model" (Hančar, 1939–40; p. 94). This figurine was found in a pit dwelling used by mammoth hunters and is assigned by Hančar, on the basis of implements found in its vicinity, to the late Aurignacian era, parallel in time to the Solutrean era in the West (p. 92).

The figurines of profile type found at the prehistoric dwelling place of Mézine (Ukraine) are only a few centimeters high. They have been interpreted variously as birds and as women. Probably they represent both. The only aspect of their form that is

identifiably female is the backward thrust of the buttocks balanced by a “well-pronounced and otherwise unexplainable pubic triangle” (Golomshtok, 1938, p. 354).

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Among these figurines of bird-women is one (4 cm.) which is particularly enigmatic and yet replete with significance. On the front is a large sexual triangle, which occupies almost the entire surface. Upon the underside of the arching buttocks — the seat of fertility — zigzag or meandering lines have been engraved. At the Fifth International Congress of Pre- and Protohistory, Carl Schuster (1958) interpreted these as a symbolic genealogical representation and took them as the starting point for a development of ancestral representations, culminating in the weaving patterns of living primitive peoples. This would strengthen the view that there were prehistoric conceptions of some kind of Magna Mater: Hančar puts the Mézine figurines in the late Aurignacian era (p. 134).

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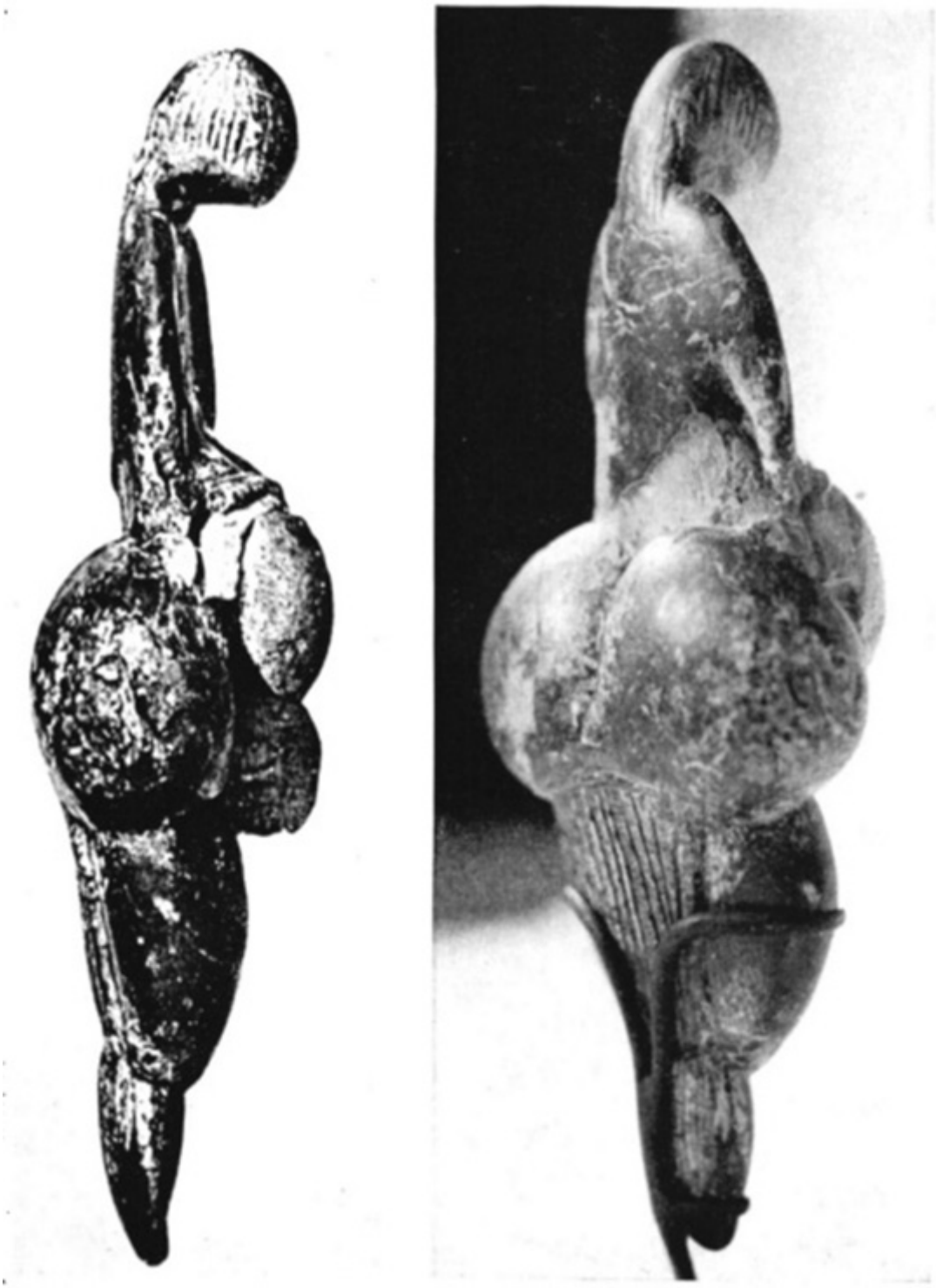
The profile type persisted into the Magdalenian period. Various strongly abstract figurines were excavated from Magdalenian strata at Petersfels (Baden). These are carved from lignite, and the outline of the body has been so compressed that the shape of the figurines almost resembles the form of a garden slug. The profile of these undoubtedly Magdalenian figures has been condensed to the essential: the balloonlike swelling of the buttocks. Both upper and lower parts of the body taper to a point: the Savignano Venus in abstract form. The upper part is perforated, bringing to mind the amulet character of these fertility charms.



294. LESPUGUE (*Haute-Garonne*): *Frontal type of Venus figurine* (*4.7 cm.*)

295. ABRI PATAUD (*Dordogne*): *Fro type in low relief* (*6 cm.*), *embedded in rock*

A. Leroi-Gourhan brings together with this abstract figure from Petersfels the headless female engravings from La Roche (Dordogne) and the bird women of Mézine, "which, like the claviforms, are all reduced to the axis of the body and a lateral expansion" (1958, p. 388).

THE FRONTAL TYPE OF VENUS FIGURINES

An abstract figure from Předmostí

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The abstract engraving on a mammoth tusk (15.5 cm.) from Předmostí, Czechoslovakia, is now attributed in Breuil's classification to the *paléolithique gravettienne*, whose tools were similar to the Perigordian: "skillfully worked flints related to those which, in France, we have termed Perigordian or Gravettian" (Breuil, 1956–57, p. 86).

This highly abstract personification was first recognized by Obermaier to be a "geometrically conventionalized female figure" (1924, p. 223). It came from a camp site of mammoth hunters upon the Moravian loess plain. The basic composition of the frontal type is revealed in this engraving with a terse clarity. To turn for a moment to Breuil's description of the head: it is "a triangle with curved sides, complicated by internal bands of hatching running horizontally and vertically, some of which would seem to correspond with its eyes, nose, and mouth" (1956–57, p. 87).

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The head consists of a triangle with one convex and two upright concave sides. It is far more likely that this represents either a bird's head or a bird mask rather than an abstract female head. There are also no ears. Female figures with bird heads occur on the Aurignacian ceiling of the Hall of the Hieroglyphs, Pech-Merle, and bird heads occur on various personifications in the recently discovered cavern of Addaura (Sicily), which is approximately parallel to the Magdalenian era. Obermaier considered that the markings on the Předmostí engraving might represent tattooing (1924, p. 222), but this seems doubtful. In all events, the rounded triangle that forms the head of this figure is the most symbolically expressive part of the engraving.

296. EL PENDO (*Santander*): *Frontal type of headless figurine, stag horn*

297. LAUGERIE BASSE (*Dordogne*): *Frontal type of headless figurine*, *"Vibraye Venus*" (*8.2 cm.*)

In his scheme of composition, the mammoth hunter eliminated everything that did not appear important: no shoulders, breasts and head floating unattached, the arms atrophied, the hands absent. The thighs are parallel lines which then break off. Only those parts which the artist deemed of highest importance are emphasized, and this is done by multiple outlines, much in the way still common among the Australian aborigines. The same procedure can often be noticed in the work of contemporary artists, such as Paul Klee and Picasso, when they wish to give special emphasis to some form.

In the Předmostí figure the breasts have five encircling lines, the pelvic area and belly six. The navel is brought strongly forward by a series of chevrons to its right and left. The vulva, which is indicated by a curve, has also had a special area marked out for it. Apart from the head, which in this instance plays a more than usually important, although enigmatic, role, the composition has been reduced to two accented areas — the

breasts and the horizontally organized pelvic region; the limbs and skeletal form are totally neglected.

The Lespugue Venus

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The Venus (4.7 cm.) from Lespugue (Haute-Garonne) is one of the most impressive figurines from the Aurignacian-Perigordian era. The abstract engraving of Předmostí is here translated into a three-dimensional sculptural image. This little figure was found in 1922 by R. de Saint-Périer in the cavern of Rideaux, near Lespugue, and is today in the museum at St-Germain-en-Laye. Some parts, damaged by the spade, have been convincingly restored. The highest craft of primeval sculpture was employed in the finish of this figurine.

Saint-Périer has drawn attention to a noteworthy detail: "the organization of a space between the arms and body . . . indicates an advanced technique in the art of sculpture of which this figurine is the first example in paleolithic art" (1923, pp. 373–74). This is, in fact, the earliest instance, the premature beginning, of an important later development: the indication of a small space between arm and body. This figurine has rightly been assigned to the late Aurignacian-Perigordian era.

It is hard to tell whether or not millenniums lie between the abstract figure from Předmostí and this vibrantly plastic idol from Lespugue. Both belong to the same long era, both have the same scheme of composition: very cursory treatment of the limbs, legs tapering to a point, absence of feet, bare indications of the arms. These all serve as a kind of plastic foil to the two chief points of interest: the strongly accented downward flow of the breasts and the billowing, balloonlike spread of the pelvic area, well beyond the normal outline of the body, which is most typical of the frontal type.

The Venus of Abri Pataud

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In 1958, during a Harvard University excavation conducted by H. L. Movius, Jr., a small Venus (6 cm.) was found at Abri Pataud, in Les Eyzies, amidst loose pieces of limestone in a late Perigordian stratum. It is so deeply imbedded in a rough piece of limestone that it cannot be called a relief, nor is it a sculpture in the round, to hold in the hand, like the other Venus figurines. This *en face* type of Venus is unique in prehistoric art.

The craftsmanship of this miniature limestone sculpture is of fine quality. Greatest care is given to the breasts, to the generative parts, especially to the belly, whose pregnancy is strongly modeled without disturbing the slim grace of the figure. The genital triangle is precisely indicated. As always, all other parts of the body are more or less neglected. The featureless head is turned to the left, as in the Venus of Laussel.

Arms are lacking. The legs are formed simply by straight lines ending in a point. (Movius, 1960, pp. 377 ff .)

The female figure from El Pendo

In the following Solutrean and Magdalenian periods, when these miniature sculptures in the round almost disappeared, there was a prevailing tendency toward abstraction or schematism.

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The female figure from El Pendo (Santander), whose exact meaning is uncertain, occupies a special position. It was found in this cavern by J. Carballo beside a Solutrean arrowhead. The figure is made from a stag horn. Only the position of its dancing, swaying hips reveals it to be a woman. A round perforation, partly damaged, takes the place of the head. Carballo considered the whole object to be a *bâton de commandement* (1943, p. 11), but Ripoll Perelló thought this an overstatement (1957–58, p. 183).

All details of the figure have been absorbed into its abstract form. There are no breasts, nor is there any sign of the genital area, such as in the figure from Cougnac (Lot). The limbs are not differentiated, though possibly the perforation might be an abstract representation of the arms, as Ripoll suggests (p. 183). The body bears only a few slanting lines, possibly hunter's marks, similar to those on the bison horn held by the Venus of Laussel. Ripoll describes it as "a hanging object of small size whose primitive form is unknown" (p. 184). One must unquestionably agree with the Spanish prehistorians that we have here a Solutrean figure of an elegance uncommon in those primeval times.

The Vibraye Venus

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There is a great contrast between the figure from El Pendo and the Vibraye Venus. This is one of the least attractive prehistoric figurines (8.2 cm.). It was found very early by the Marquis de Vibraye in a Magdalenian stratum at Laugerie Basse (Dordogne) and is now in the Musée de l'Homme, Paris.

Its head, states Piette, had been "removed even in prehistoric times" (1907, pl. 7 (1)). Should it be considered among the headless figures? There are neither arms nor feet. Nothing is stressed except the genital area, on account of which it has acquired the name of the *Venus impudique.* Both this and the rigid posture of the body involuntarily recall the shaman figure in the "well" at Lascaux.

Later development of the frontal type

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After the Magdalenian age, the frontal type seems to vanish for thousands of years. In the fifth millennium B.C. it reappeared in a changed form in many places in the Middle East, as a seated female figure. Among the oldest of these are some found by R. Braidwood at the village site of Jarmo (northern Iraq) from around 5000 B.C. The strata from Tepe Gawra (Iraq) of about a thousand years later, and from elsewhere, yielded the same squatting type. We are here in the transition period from food-gathering to food-producing. A figure from the Nagadah period of Egypt is illustrated, built up from fragments, which expresses clearly the sidewise spread of the buttocks and strongly developed thighs.

The kneeling frontal type became a constituent feature of the flat, amuletlike idols of the Great Mother from around 3000 B.C. In these the forward-projecting parts of the limbs were absorbed into the flat plane.

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H. Frankfort and his colleagues of the Oriental Institute in Chicago excavated a number of such idols from the Mesopotamian temple sites of Tell Asmar and Khafaje, whose pelvic area was heart-shaped, reminding one of an enlarged genital triangle, the legs being absorbed within this single form (Frankfort, 1935, p. 27). Similar flat idols from around 3000 B.C. have been found in Ur, Warka (Uruk), Troy, and other places in the Middle East.

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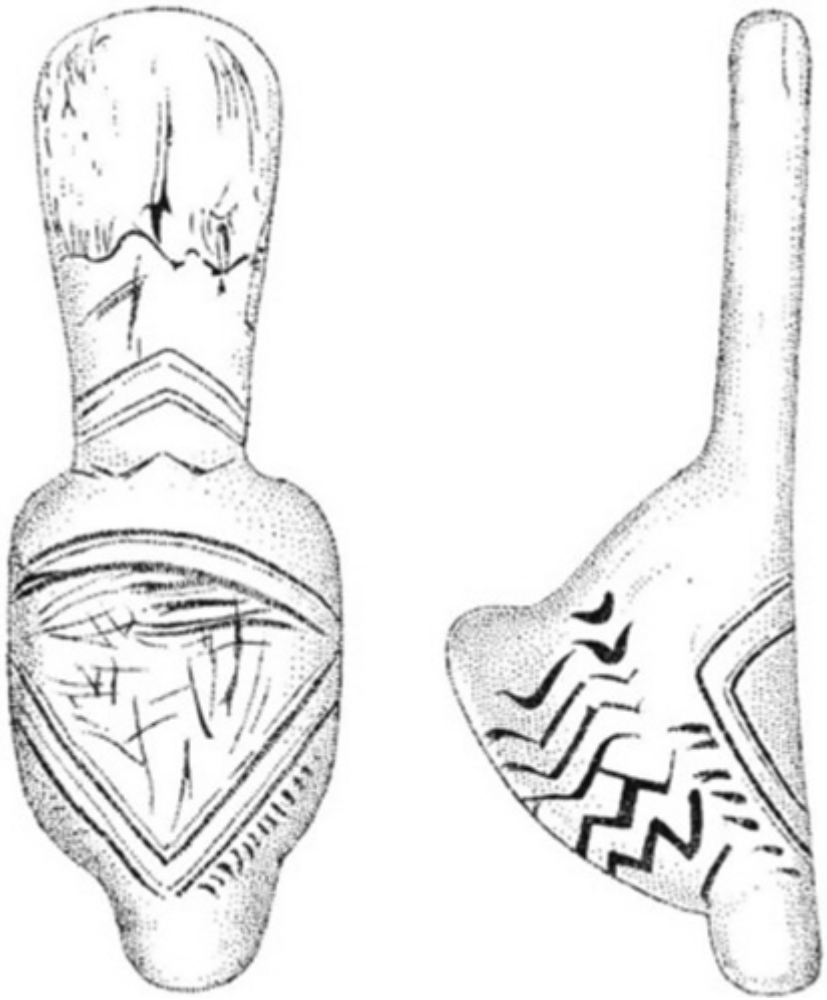
But these figurines are few in comparison with the numerous early Cycladic idols of around 2500 B.C. — flat, violin-shaped, made of marble. These are still more abstract than the Mesopotamian idols. They are both the final and the perfect example of the frontal type. The fiddle shape arose when the heart-shaped pelvic area from Tell Asmar became rounded off and this was followed by a pinching in of the waistline. The arms, which primeval art could never make anything of, now became sculpturally interesting stumps. Finally, to complete the violin shape, head and neck were combined in a single elongated strip.

These apparently simple fiddle-shaped idols represent the end of a long line of development. Behind them stretch the traditions and knowledge acquired during thousands of years. In them the essence of all that it was desired to express is reduced to a final abstract abbreviation.

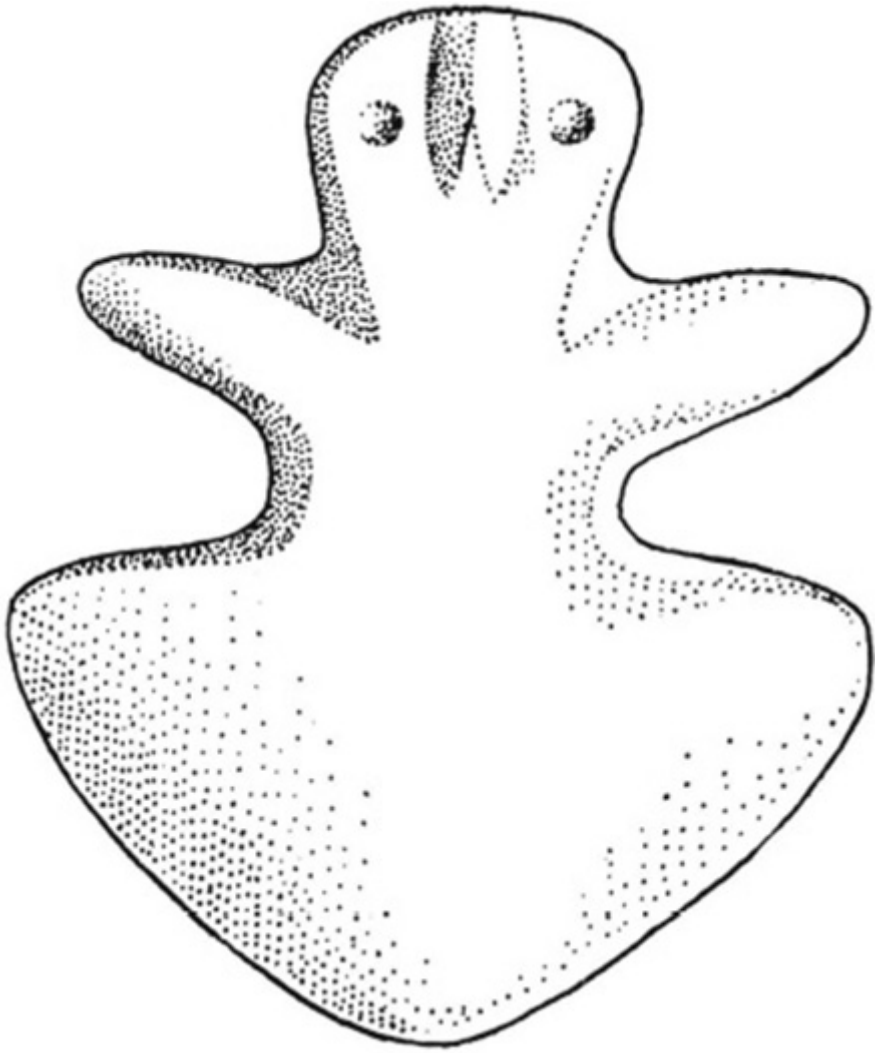
Today, as the work of our creative artists reveals, there is a strong inward urge to probe down into primeval elements, and a long historical process of abstraction is being compressed into a single generation. From this arises one of the perfect sculptures of our period, Constantin Brancusi's *Bird in Flight.* The chronological sequence of stages in the development of this work, which extended from 1910 to 1941, are illustrated in his biography (Giedion-Welcker, 1958, pp. 200–201) . The *Bird in Flight*

may perhaps be compared directly with the Cycladic idols: a continuing process of abstraction has in each case led to an intensive concentration and abbreviation.



298. MÉZINE (*Ukraine*): *So-called bird-woman* (4 *cm.*). *Drawing after Golomshtok, 1938*

299. EGYPT, *Nagadah period: Reconstructed pottery figurine of kneeling woman*



300. TELL ASMAR (*Mesopotamia*): *Mother goddess from the Square Temple. Drawing after Frankfort, 1935*

301. AMOYOS (*Cyclades*): *Violin-shaped female idol, marble*

CHRONOLOGY OF THE VENUS FIGURINES

It is generally agreed that the Venus figurines belong to the Aurignacian-Perigordian era. The question of when they made their appearance during this long epoch is unclear. The Aurignacian-Perigordian animal engravings, with their outlines and separate parts, arduously mastered over a very long time, are in marked contrast to these figurines. From their very beginning, both the outlines and the separate parts of the figurines displayed a conscious control of the representation of form. This certainty of touch was

not attained in animal engravings until the final phase of the Aurignacian-Perigordian development. The figurines had to translate the two-dimensional artistic experience of their period into three dimensions; but, even allowing for this, the form of these small sculptures exhibits an astonishing maturity. They belong to the final phase.

Further, it is by no means certain that the Venus figurines ceased to be made when the Aurignacian-Perigordian era came to an end, though proof of their later existence is scanty. Every newly discovered figurine can shed more light on this issue. In Italy, which the Magdalenian development never penetrated, the world-wide art of the Aurignacian-Perigordian era continued to live on, without becoming petrified. The Savignano Venus, from an unknown stratum, which exhibits such a high degree of sculptural refinement, may well be post-Aurignacian-Perigordian.

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On the other hand, even if there were no certain knowledge of the stratum in which it was found, its morphology would incline one to place the small limestone figurine from the Weinberg caverns as Aurignacian. However, it was found in an unmistakably Magdalenian stratum.

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The abstract bird-women from Mézine, with their highly developed symbolism, must also be of a later date. The bone industry of Mézine was extremely rich and varied: "According to investigators, needles were usually perforated" (Golomshtok, 1938, p. 347). Such needles have certainly never been found at western European Aurignacian-Perigordian sites. In relation to the enormous span of time involved, the number of figurines known to have been found is deplorably small. Too many intermediate stages are lacking for there to be any basis for tracing a clear line of development. Only one general conclusion can be drawn: they arose in the late phase of the Aurignacian-Perigordian era and did not come to an end with its close.

Another gap exists between the disappearance of these figurines and their reappearance around the fifth millennium B.C. Only when some of the missing links are found which lead up to the figurines of unburnt clay from the food-gatherer period which Braidwood found at the village site of Jarmo (northern Iraq), will it perhaps be possible to trace the development of the earliest plastic idols.

SIGNIFICANCE OF THE VENUS FIGURINES

The Venus figurines acquired their name at a time when they were believed to represent erotic figures — prehistoric pin-up girls, as it were. This notion has now been abandoned, just as the early attempt to describe these cult objects as steatopygous or diseased. The name Venus has, however, persisted in use ever since the time of their first discovery. Even today it is not possible to find an accurate generic name for them,

as their meaning can only be conveyed in general terms. Like so many primeval symbols, it centers upon the desire for fertility, for the procreation and increase of the species: human and animal. That the animal world was also included in this fertility wish is shown by the bison horn that the Venus of Laussel holds in her uplifted hand.

In the rock shelter of Laussel, which was certainly a fertility shrine, three Venus figures were found; at Gagarino on the Don, seven figurines made of mammoth tusk were discovered close to the wall of an oval pit dwelling (Golomshtok, 1938, p. 325). These finds are sufficient to justify referring to them as cult figures. How far they move beyond a simple personification of the desire for fertility and become precursors of an earth mother — a Magna Mater — is difficult to judge. F. Hančar gives an extensive survey of current interpretations (1939, 144–54).

Almost without exception, these figures "do not present the female form in its youth but instead show older women or mother figures" (Maringer, tr. 1960, p. 153) which could be the idols of an ancestral mother cult. "In the form of these ancestral mothers the hunter reverenced the primeval power of procreation and increase from which the tribe and family came into being; he reverenced the guardian of sexual life through which the tribe and family continued to exist; he reverenced the protective spirit of the hearth; and last but not least the helpful powers which guided his hunting" (p. 201). It is uncertain whether the Aurignacian-Perigordian figurines of western Europe could be considered as domestic divinities, for here they have only been found in the caverns, not in dwelling places.

In dealing with primeval symbols, we would do well not to confine their meaning within too narrow bounds. The female figures which occur from southern France all the way to Lake Baikal in Siberia, may best be interpreted generally as fertility idols, fertility charms.

444

In *The Great Mother*, Erich Neumann perceives a special meaning in the contrast between the abstractly presented upper half of the body of the Lespugue Venus and the maternally elaborated fertility complex below: "A contradiction within the Feminine itself is manifested in the paradoxical formal contrast between above and below. The lower, child-bearing and maternal aspect is combined with an almost irreconcilably different prewomanly, virginal aspect above . . . The delicate upper part and the virginal head are bent over a luxuriant body bursting with the elementary fullness of motherhood, so stressing by purely stylistic means the contrast between the static elementary character of the mother and the dynamic transformative character of the young woman" (1955, pp. 103–104).

"The coexistence of naturalistic elements and of abstracting, imaginative elements in the same work of art" (p. 107) appears again and again throughout the whole of primeval art and by no means only in relation to fertility symbols, although it is particularly obvious here.

FIGURES WITHOUT HEADS

It is astounding how far back into prehistory certain rites and symbols reach and how they maintained their significance through unimaginable eons. One of these is the headless female figure, which to us appears so exceptionally strange. An interpretation, based on certain ethnological data, will be attempted at the end of this section.

Pech-Merle

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The earliest of these figures, with gaping neck and feet fused together, was drawn upon the ceiling of the Hall of the Hieroglyphs at Pech-Merle (Lot) at an early period of the Aurignacian-Perigordian era. Two female figures are here intertwined with a complex of animals and symbols. These figures are of the profile type, with a pronounced backward thrust of their swelling buttocks, similar to several of the Venus figurines.

Les Combarelles

It is a long jump from this early period to the Magdalenian era in which variations of the profile type appeared. Certain structural changes have occurred: the swelling buttocks remained — at least in the beginning — but the breasts and belly became absorbed into a single abstract curve.

458

In the center of one of the major groups of drawings at Les Combarelles (Dordogne) two such female figures stand one behind the other. The body of the leading figure tapers to a point. The other is without a head: the neck gapes open. It cannot be assumed that the head has become covered by a nearby extrusion of the rock crust. The profile type is accentuated by their posture, tilting sharply forward from the hips. There is no hint of any breasts on the larger figure. When Breuil first described these figures, in his impressive monograph on Les Combarelles (Capitan, Breuil, Peyrony, 1924, p. 94), comparative material was very scanty. Although his description of these figures was necessarily somewhat cautious and indefinite, he did recognize them as approaches to the representation of female figures. In the drawing he reproduced, the second figure was traversed by three fine strokes (p. 59). In the drawing reproduced here only one of these lines is shown, which can also be observed in the photograph.

La Roche

459

The strokes which so indistinctly traversed the second figure at Les Combarelles appear with much greater definition on a block of stone from the cavern of La Roche, near Lalinde (Dordogne).

This block is covered with headless female figures. They are the final abbreviation in two dimensions of the profile type of Venus figure. One part of this stone block (60 x 45 cm.) is in the museum at Les Eyzies, the other (35 x 24 cm.) in the Field Museum, Chicago. On the Les Eyzies section there are ten deeply engraved female figures, "apparently scattered haphazardly over the whole surface" (Peyrony, 1930, p. 26); on the Chicago section are six more. In most instances the neck gapes open, but in some figures the lines are crossed over one another.

Peyrony noted, even then, the many curious strokes (pp. 27–28) which appear to transfix the bodies, usually in those parts related to fertility. There is never more than a single stroke, and this is usually contained within the outline of the body. They certainly do not represent spears thrown by assailants, since on no part of this block, which dates from the Magdalenian era, do the engravings of any of the figures suggest flight or pursuit, such as appeared later in eastern Spanish rock paintings.

441

These headless female figures from La Roche bear a startling resemblance to the lignite figurines found at Petersfels (Baden). When the two are compared it becomes clear that those pendant amulets were also conceived without heads.

Abri Murat

8

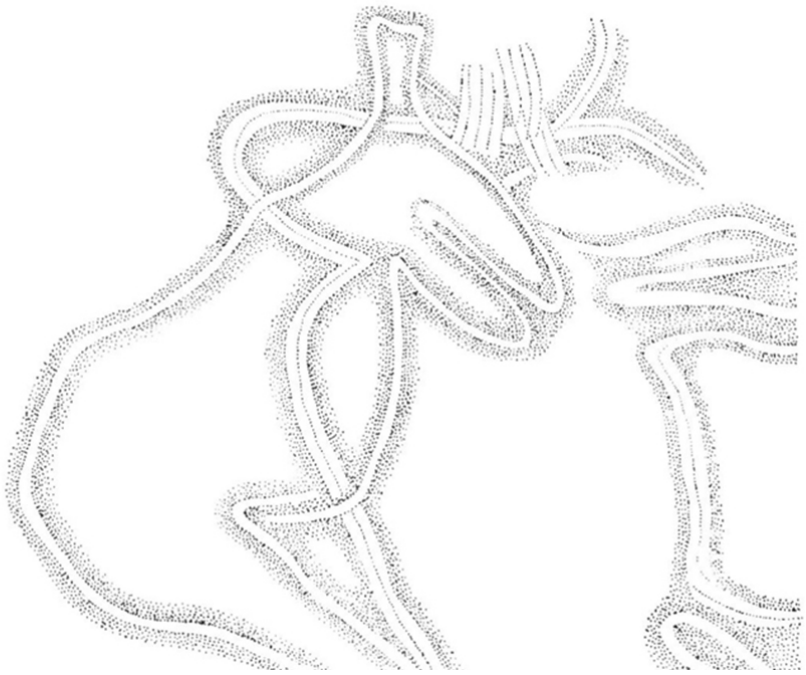
45 A pebble from the Abri Murat (Lot), found by the Abbe Lemozi and now in the museum at Cabrerets, shows a finely engraved profile type of female figure. This figure has a bird mask and is pierced through by long lines.

Cougnac

269 col, 462, 482

In the cavern of Cougnac, near Gourdon (Lot), discovered in 1952, are three female figures (Méroc and Mezet, 1956, pp. 35–37). Two are headless, the third has a head like a bird. All are from the Magdalenian era but later in date than the figures at La Roche. In these, as with the slender, reclining female figures in La Magdeleine (Tarn), all steatopygous bulbousness has disappeared. The figures at Cougnac were drawn inside the outlines of huge Aurignacian-Perigordian animals: two are within the bodies

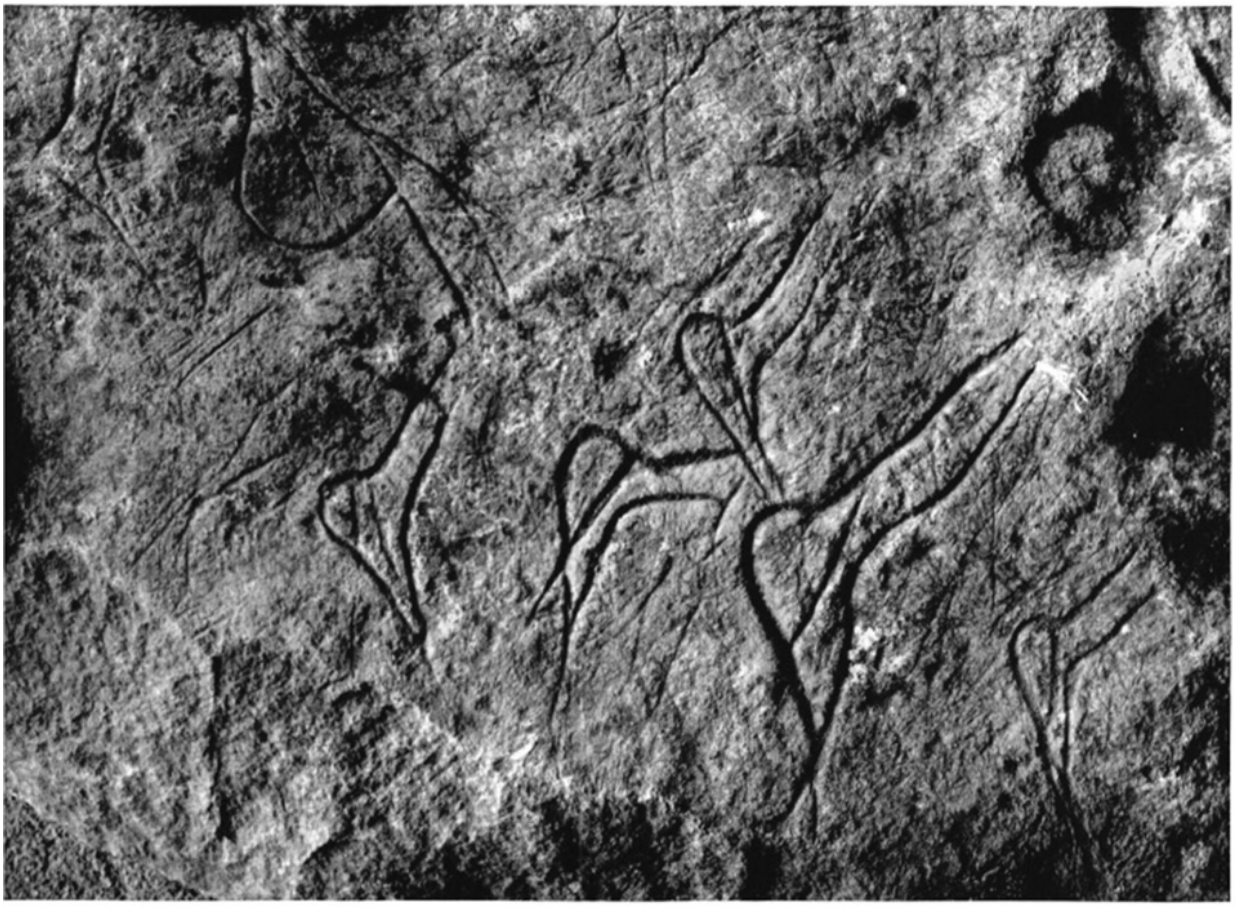
of very crudely drawn elephants, and the third occupies a prominent position within the outline of an elk.



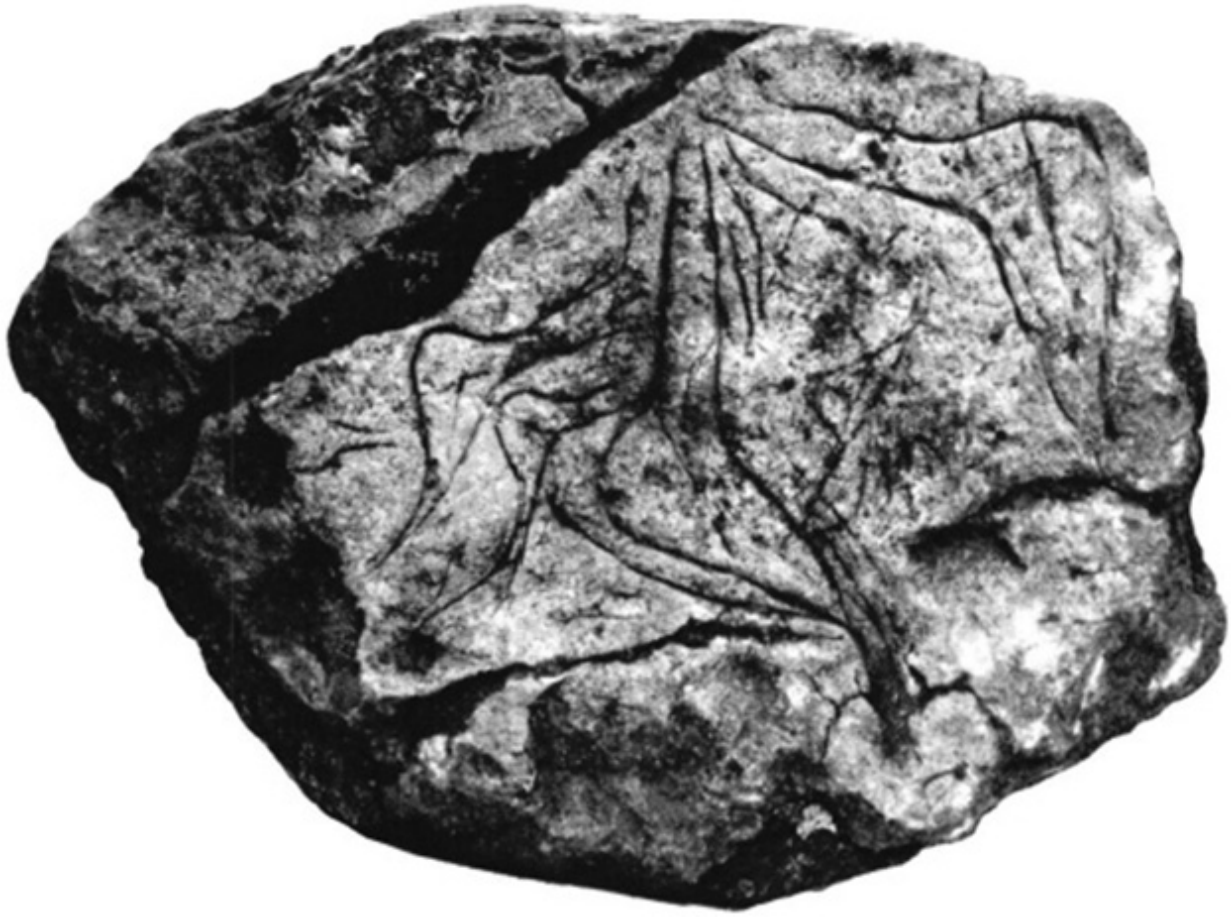
302. PECH-MERLE (*Lot*): *Hall of the Hieroglyphs. Headless figure traced in clay, and mammoth. With drawing*

303. LES COMBARELLES (*Dordogne*): *Two female figures, one without a head. With drawing*

304. ABRI MURAT (*Lot*): *Pebble finely engraved with female figure in bird mask. Drawing by Lemozi*



305. LA ROCHE (*Dordogne*): *Part of a stone block, with six headless female figures crossed by lines* (*Field Museum*)



306. LA ROCHE: *Part of the same block engraved with ten headless female figures crossed by lines* (*Museum, Les Eyzies*)

269 col & right

An investigation of their immediate setting is suggested. The cavern of Cougnac, which was discovered by a water diviner, differs from most other caverns in that, although covered with signs and drawings, it has no secret setting for its cult symbols. Everything is open and convenient. Even in prehistoric times several slender stalagmite columns had already been broken down to make the approach easier. The chief scene drawn upon the walls is a "triptych," whose three parts are separated from one another by the folds of a natural stalagmite curtain. To the left is a pair of reindeer, one behind the other. The center panel is dominated by a large elk, a *Cervus megaceros*. All are from the Aurignacian-Perigordian era. On the right hand panel are several ibexes which bear a clearly Magdalenian imprint.

464

The headless female figure (28 cm.) is significantly placed right in the center of this whole composition, within the outline of the great elk. She exhibits no particular indications of her sex and is recognizably female only because of the shape of the thighs and the general plumpness of her body. The outline is sensitive, the thighs are curved, there are no feet: the outline of the body broadens out towards the upper part but comes

to an end before shoulder height. Like many earlier figures, the body is bent forward, though here this has been tempered to a leaning posture. The figure might appear to have been struck, possibly while in motion, by three long strokes. They are slightly curved — a point not without significance. Again here, as at La Roche, there is no indication of an assailant, there is no question of pursuit or of combat between man and man. It is striking that this figure lacks every outward indication of her sex — a rare occurrence in primeval art. Yet this very fact may lead us nearer to her significance.

The "prehistoric archer" of Pech-Merle

467

It was the Abbé Lemozi who gave this name provisionally to a figure (50 cm.) found by him in one of the most secret recesses of Pech-Merle (Lot). "This figure is so hidden away that it was not noticed until long after the first explorations" (1929, p. 120). It is not headless but has a birdlike head; in other respects it is drawn partly as an animal and partly as a human being. Again the body is traversed by long lines. These are so far from being straight that Lemozi took their curvature to represent a bow and arrows carried by an archer. They certainly do not represent arrows, spears, or any weapons in the ordinary sense. They are irregularly curved and are symbols: magic missiles, magic lines of force, magic emblems of fertility. A curving line to the rear might hint at an animal tail.

307. COUGNAC (*Lot*): *Interior of the cavern, showing columns and curtains of stalagmites and stalactites; the wall with paintings is behind the opening*

467

The birdlike, pointed mask of this figure, as well as its general slenderness, gives it a close resemblance to the masked human figures in the cavern of Addaura, Monte Pellegrino (Sicily). The attachment to the Pech-Merle bird head of a large and curious symbol has long been inexplicable. But, when the cavern of Cougnac was discovered in 1952 the same symbol was found standing alone upon a wall.

468

The secret location of this figure in the cavern of Pech-Merle, the curvature of the lines which traverse it, and its connection with a magic symbol make it evident that this is no scene of combat. Primeval art is without scenes of human conflict until the end of

the mesolithic era — at its very last phase, in the bronze age. The situation thereafter was completely different, as is immediately apparent when one glances at some of the rock paintings of eastern Spain. Javelins and arrows whistle through the air. A well-known scene of execution in the Gasulla gorge (Castellón) shows the victim lying outstretched on the ground while his executioners triumphantly wave their bows over their heads.

308. COUGNAC: *Female figure with birdlike head drawn within the outline of an elephant*

AN INTERPRETATION OF THE HEADLESS FIGURES

464

Neither the female figures from La Roche nor the headless figure from Cougnac can be interpreted as representing human conflict or scenes of execution; still less the carefully concealed figure of the "archer" with its bird mask. These figures depict no fight of man against man or of man against any earthly foe. The "arrows" that transfix the bodies of these masked or headless figures are magic projectiles. On the other hand, it is wise to avoid relating these headless figures, pierced with long lines, to our concepts of a deity. In prehistoric times the actual and the transcendental merged into one another. The

reality in this instance was a human being who was shown in the symbolic form in which he acted as a mediator between visible and invisible powers.

Drawing for fig. 308

309. COUGNAC: *Headless female figure within outline of large elk. With drawing*

310. COUGNAC: *Detail of headless female figure, crossed by three long lines*

With the alteration of the earlier contemptuous attitude toward primitive mentality, the attitude toward shamanism also began slowly to change. The shaman has come now to be recognized as a highly varied type and as a specifically trained mind, whose chief characteristics were that he was not supported by any body of dogma and that he was in direct contact with supernatural forces.

A comprehensive body of Russian literature on the circumpolar peoples already existed when U. Harva of Finland (1938) and A. Ohlmarks of Sweden (1939) began to accord recognition to the significance of shamanism.

Then M. Eliade placed the phenomenon of shamanism in its rightful wider setting. He clarified the notion of the position of the shaman as the mediator between the earthly world and invisible powers, and removed much of its former obscurity (Eliade, 1951) . He has shown that the shaman was not merely a medicine man or a sorcerer but that "in the whole of the immense region which comprises the center and the north of Asia, the magical-religious life of each society is centered upon the shaman. . . . The shaman is still the dominating figure for, in that entire area in which a state of ecstasy [*l'experience extatique*] is considered to be the highest expression of religious experience, the shaman, and he alone, is the grand master of ecstasy" (p. 18).

Drawing for fig. 311

The shaman, as he still persists in northern Asia, Indonesia, Australia, Tibet, and North and South America, has absorbed certain features from the principal world religions, such as that he travels in his ecstasy to heaven and to the depths of the sea. Once such accretions have been cleared away the basic concepts reappear.

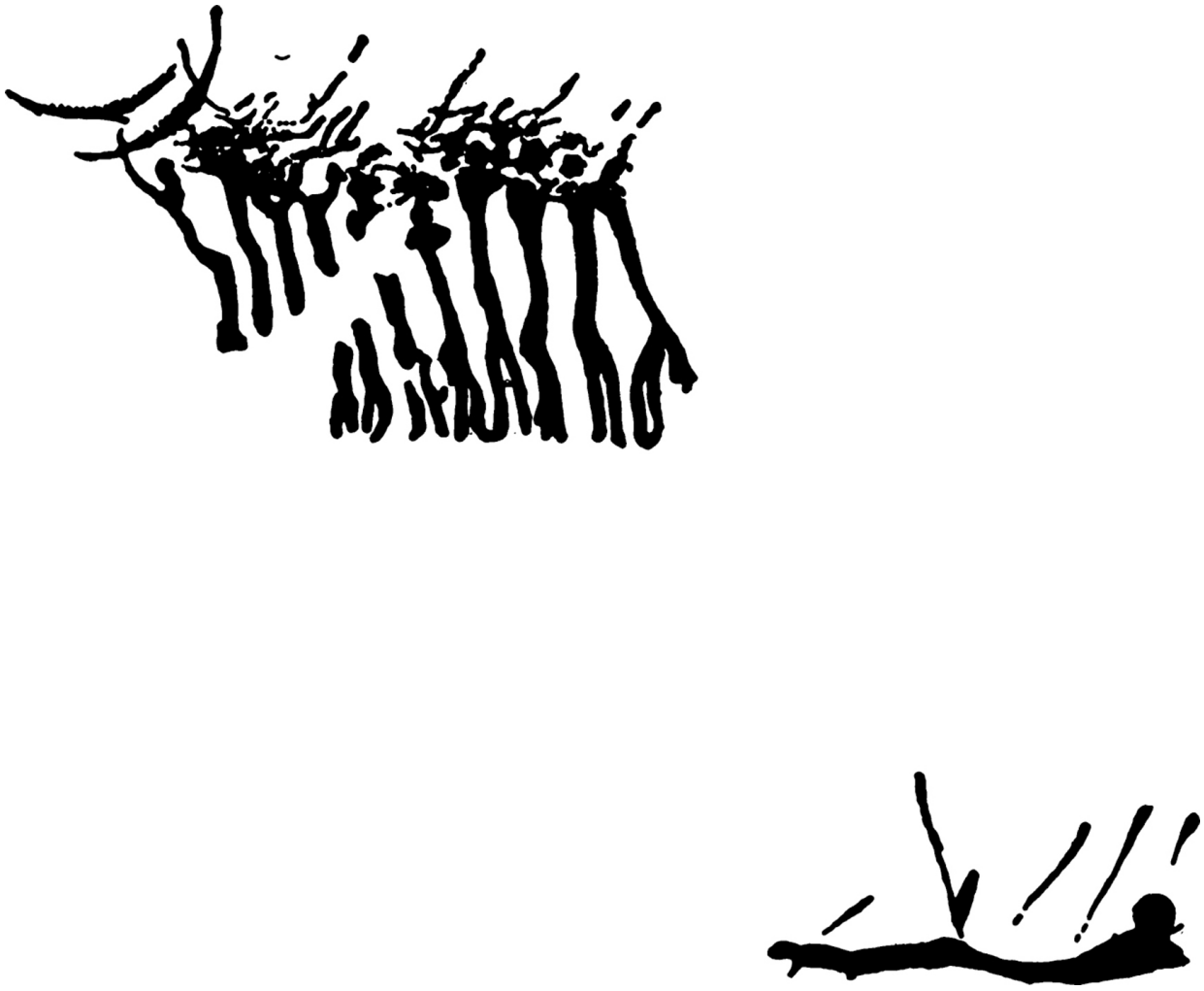
To become an initiate, with access to the invisible powers from which the ordinary man is debarred, it is necessary to become a new man, to undergo a deep and thorough transformation. This is the basis of all initiation rites. The shaman therefore must pass through all three stages of suffering, death, resurrection (Eliade, 1951) . The methods of achieving this transformation vary in different places, but the three stages can always be identified.

The “torture initiation” includes, among other things, dismembering the body. The head is cut off, the viscera are torn out and replaced. Among some Siberian peoples, such as the Tungus, the head is cut off by the souls of dead shamans who “throw the head into a caldron. . . . His shaman ancestors have come to initiate him: they pierce him with arrows until he loses consciousness and falls to the ground” (p. 54). No divine being is here involved; those who are invoked to accomplish the initiation of the shaman are his human shaman ancestors.

311. PECH-MERLE (*Lot*): *The "prehistoric archer," from a hidden corner of the cavern—a human figure, traversed by long lines, with a birdlike head to which a curious large symbol is attached*

312. COUGNAC: *Symbol like the one in Pech-Merle*

An interpretation of the headless, pierced figures, which also takes into account the peculiar faculty of prehistoric man to pass directly from reality to the transcendental, may lie in the shamanlike mediating figure. This could explain their strokes or darts and headlessness as symbols of the necessary transfiguration through suffering, death, and resurrection, which differentiated the human being invested with higher powers.



313. GASULLA, REMEGIA (*Castellón*): *Scene of execution. Drawing from Porcar et al., 1936*

FEMALE AND MALE RELIEFS

As yet only three female figures carved out of the rock face have been discovered: in Laussel (Dordogne), in the cavern of La Magdeleine (Tarn), and beneath the rock overhang of Angles-sur-Anglin (Vienne). These for long ages represented the first attempts to depict the human figure in relief. It was not until many millenniums later, in Sumer and Egypt, that men again grappled with this problem, which has not lost its interest even today.

These prehistoric pioneering works betoken a great artistic courage and boldness, for, owing to the ascendancy of the animal, no three-dimensional representations had ever been attempted of the human figure, except for the amulet-sized Venus figurines.

The Venus of Laussel

472, 270 col

The Venus of Laussel (Dordogne)—the "woman with the horn" — occurs in every history of art but is always reproduced directly from the front. This view makes this highly plastic relief appear as flat as a pancake and greatly reduces its artistic intensity. In actuality this is the most vigorously sculptured representation of the human body in the whole of primeval art.

472

This relief originally formed part of a parallelepiped block of stone — almost a stele: "One face of the block measured about 1.2 m. the other 1.6 m." (Lalanne, 1912, p. 138). The outward curve of the figure followed the natural curve of the surface of the block in which she was embedded, as if hovering. This is the way the Venus was photographed by her discoverer, a physician, J. G. Lalanne, being thus reproduced as a full page in the journal *L'Anthropologie* (1912, p. 135). It indicates how the figure should really be observed.

471, 239, 475

The stone block from which the Venus was carved formed the center of a sanctuary. Other large blocks were also found: "It is permissible to conclude that this was a kind of cella, a place reserved for the rites associated with works of art" (Lalanne and Bouyssonie, 1941–48, p. 18). All finds indicated that it was a fertility shrine: the relief of an enigmatic double figure; two other much rougher female reliefs on thin limestone

slabs; ithyphallic figures, and a wealth of fertility symbols. Other finds included the beautiful relief of a "standing man" (pp. 117–63).

right

The sanctuary of Laussel is situated about halfway up the slope of the valley of the Beune, one of the smaller tributaries of the Vézère River. It is about five miles from Les Eyzies and under a mile from the sculptured frieze of horses at Cap Blanc. The large rock shelter of Laussel was inhabited from the early Mousterian to the Solutrean era, but particularly during the Aurignacian-Perigordian period. Like Cap Blanc, it is oriented toward the south. The limestone overhang which shelters the dwelling site is here particularly beautiful, and the dwelling place itself was on a terrace, over one hundred meters long, above a drop down to the foot of the valley. It was, in every respect, an exceptionally protected shelter, and at its end stood the sanctuary in which the Venus block was found, the figure facing outward towards the shelter.

It is to be regretted that this unique fertility sanctum is now completely overgrown with vegetation. The finds, with the exception of one relief, are preserved in a small museum at Bordeaux, within the residence of Dr. Charon, a son-in-law of Dr. Lalanne.

Some passages follow from the first description given by Dr. Lalanne of the "woman with the horn," which he found in 1911: "It is a statuette carved into a block of hard limestone; it represents a nude female, holding in her right hand the horn of a bison. The figure is 46 cm. tall. . . . The head, though largely disengaged, presents no traces of a face. Despite this, one can observe that it was carved in profile. . . . The neck is clearly defined and elongated. . . . Two long and pendulous breasts, oval in form, grow beautifully out from her chest. . . . The belly is somewhat pronounced, but well proportioned and slightly drooping. . . . The right arm falls naturally beside the body but the forearm is raised to the height of the shoulder where the hand supports a bison's horn. The whole body is polished except for the head. . . . The statue was originally painted red" (1912, pp. 134, 137–38).

473, 477

The figure and the block are inseparably interlocked. In the position selected by the artist for this relief, the block had a slight overhang, so that the figure swelled forward gently. When seen from the side, the curve appears as taut as a strung bow. It swells up to the supreme point, the maternal belly, then falls away at either end and sinks slowly into the rock, in which the feet seem to melt. The upper part of the body curves gently backward, and the head, resting between two rock projections, seems to be reclining as though on a cushion.

476

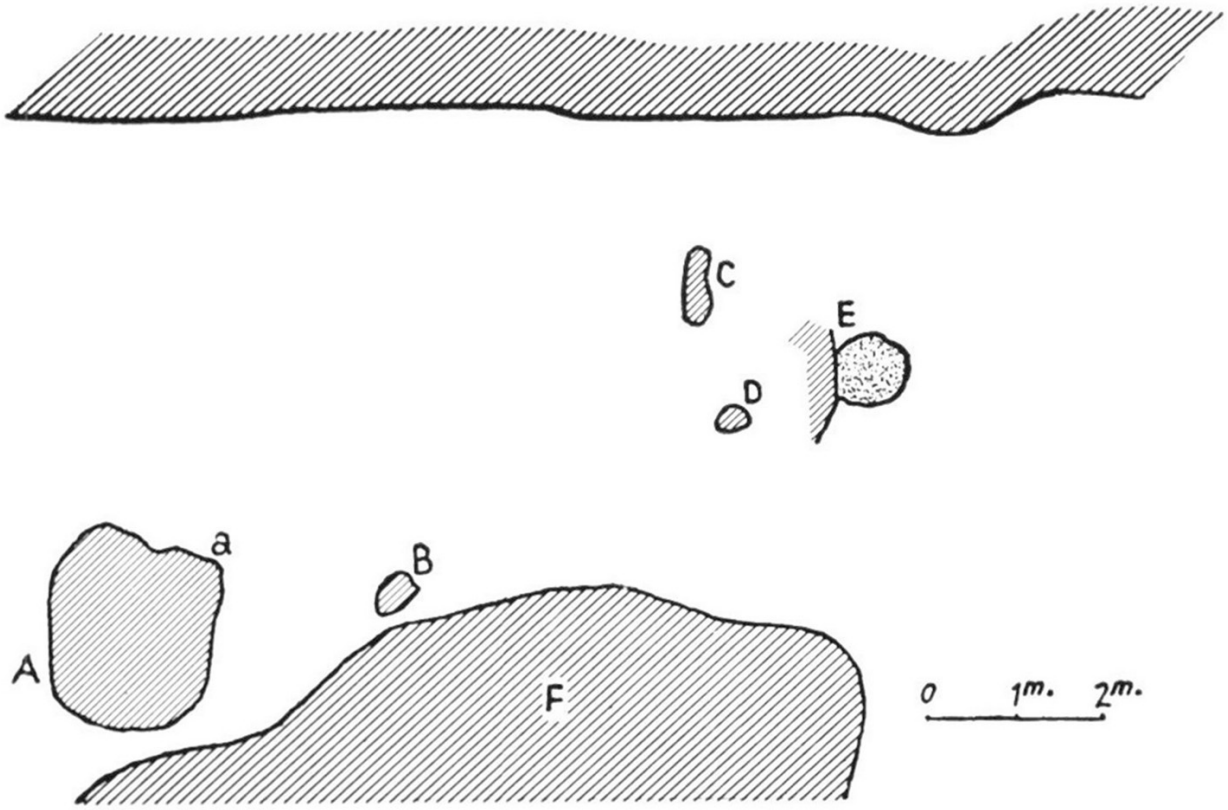
The right arm, which raises the bison horn into the air, is carved almost completely in the round; the other arm, which had nothing to express, is barely indicated; the fingers

are merely engraved, seemingly sunk into the abdomen.

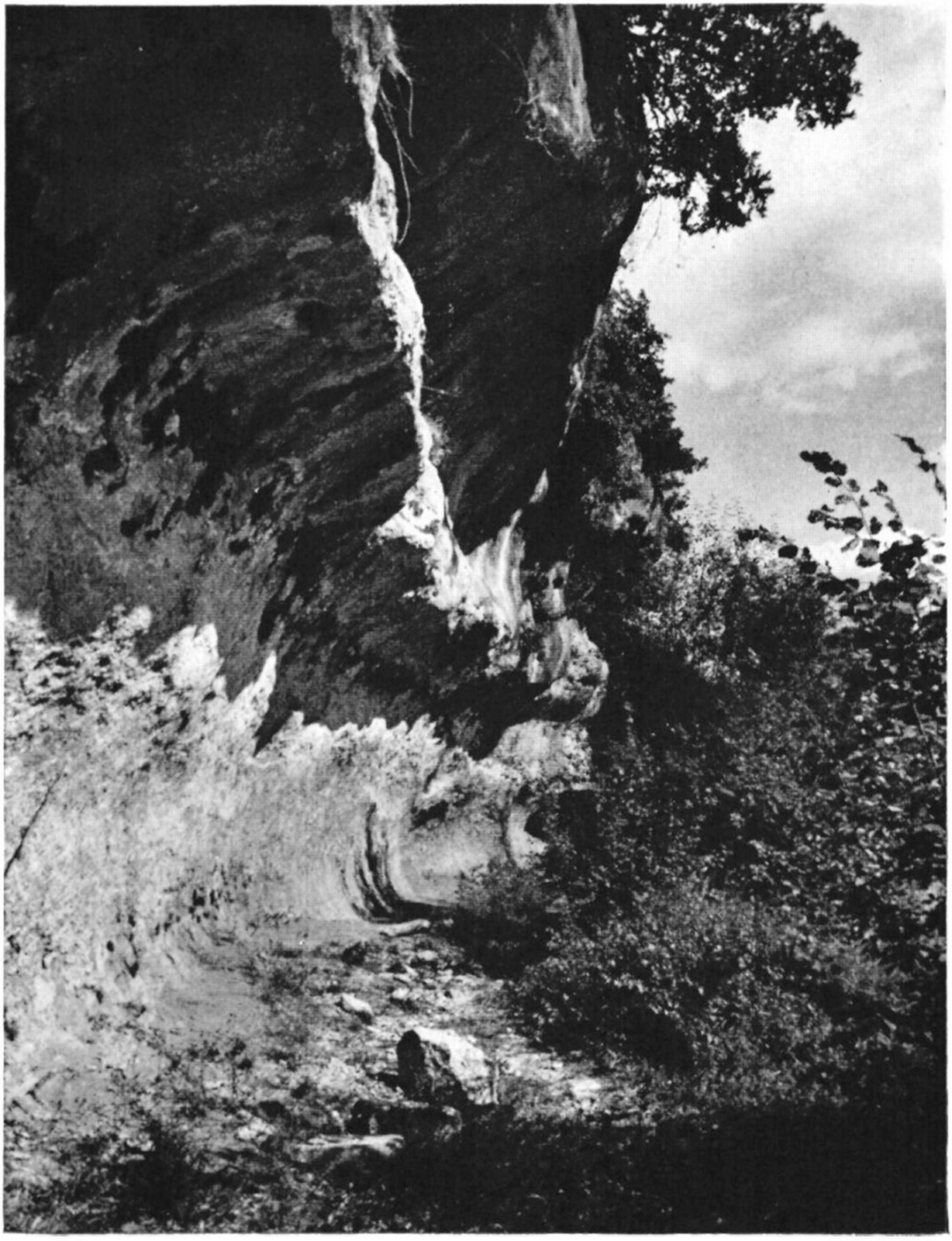
No part of this figure is without vitality. The bison horn with its hunting notches, which would normally be depicted entirely in one plane, curves sculpturally, clinging to and emphasizing the curve of the rock. The hand holds it carefully in a horizontal position, like two other female reliefs at this site. This position recalls the belief, current among some African tribes, that a horn filled with blood is the highest symbol of fertility.

Every aspect of this relief is concentrated upon the foci of fertility rites: the horn and the belly. Every aspect is organized accordingly: the pull toward the bison horn is hinted at by the slight asymmetry of the breasts, pushed somewhat over to the right. This concentration upon these essentials is also aided by certain deformations and deliberate omissions. The monumental quality of this figure is undeniable: it distinguishes the "woman with the horn" from all other Venus figures.

This relief has been attributed to the Aurignacian era. But the methods employed here to achieve the effect of modeling are Solutrean. If we refer to Dr. Lalanne's description, it does not seem entirely clear in what stratum it was found. He states that the block with the Venus "was deeply embedded in upper Aurignacian deposits and, directly at the foot of the statue, we recovered a number of objects" (1912, p. 138) — objects which would seem to indicate a Perigordian stratum. But not unconditionally. The Venus, which was higher up, could also be of a later date than the flints found at the foot of the block. The much more primitive low relief with two figures was, according to Dr. Lalanne, found in an early Solutrean stratum. Whatever the case, the technique of the Venus of Laussel is characteristic of the Solutrean period. In the Aurignacian-Perigordian era nothing similar to it has yet been found.

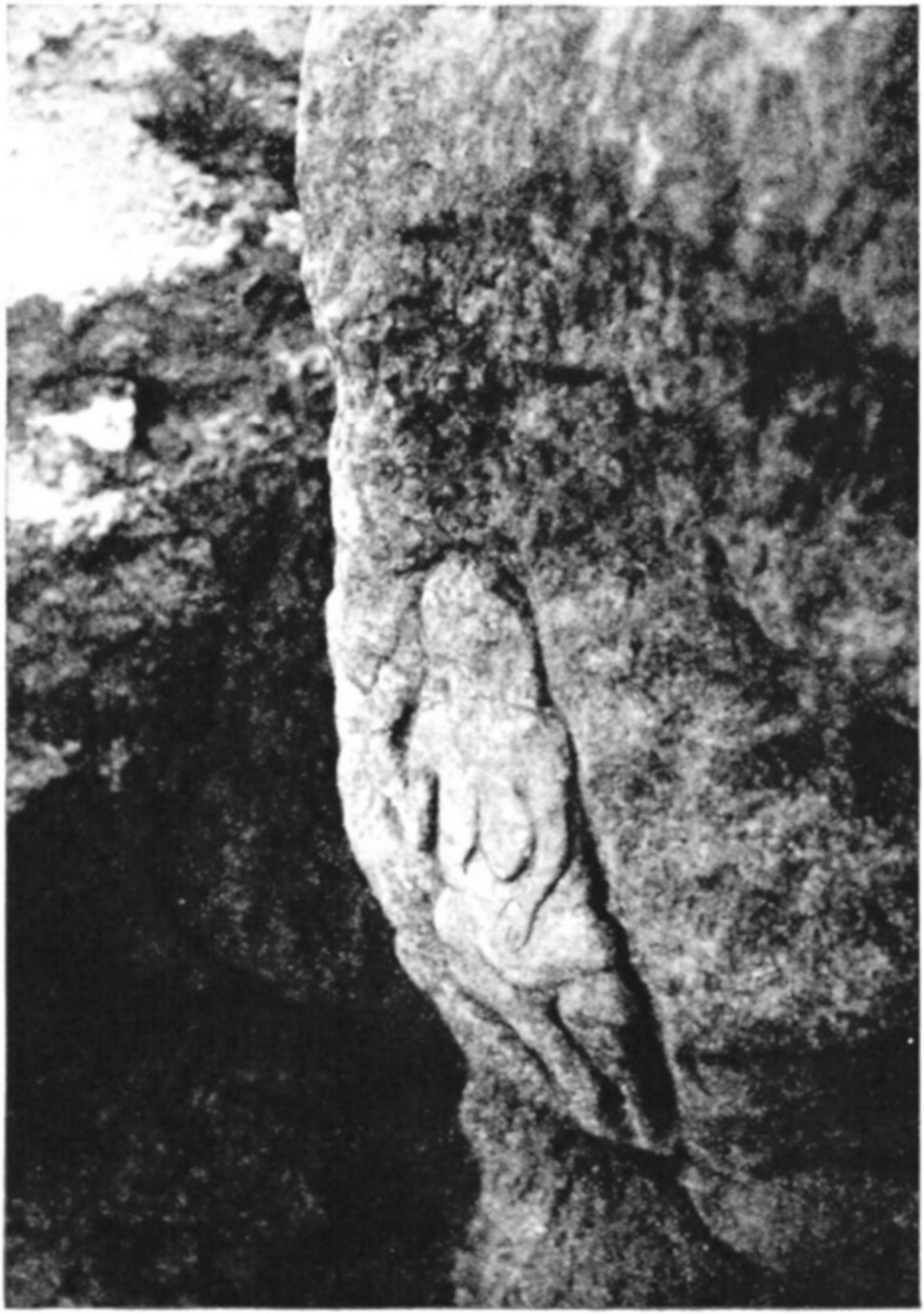


314. LAUSSEL (*Dordogne*): *Plan of the site. To the right of the overhang, somewhat deeper than the rest of the level, is the sanctuary, formed of large and small blocks* (*probably fallen from the overhang*) *on which the reliefs were placed. A) The largest block* (*12 x 16 cm.*) *containing the Venus* (*a*); *B*) *block with a smaller female relief*; *C*) *block of the standing man*; *D*) *small block with a hind*; *E*) *block colored with ocher*; *F*) *fallen blocks which cover the Aurignacian strata. After Lalanne*, *1912*

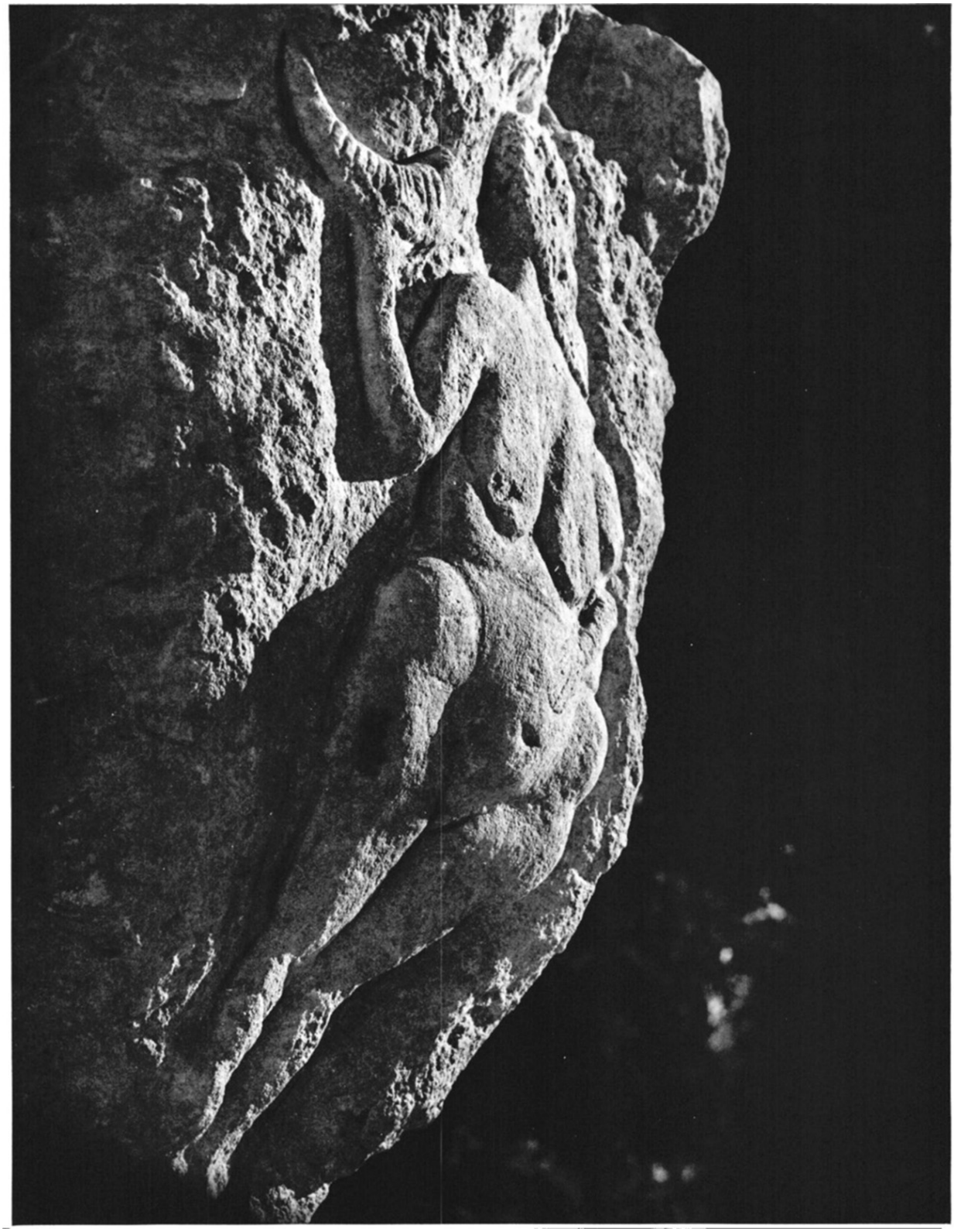


315. LAUSSEL: *The limestone overhang of the shelter*

316. LAUSSEL: *The "Venus of Laussel" as usually reproduced in art books and on postcards*



317. LAUSSEL: *The Venus in her original position, as photographed (1912) by her discoverer*



318. LAUSSEL: *The "Venus of Laussel"* (46 cm.) *photographed as it would have been seen from the side in its original position*

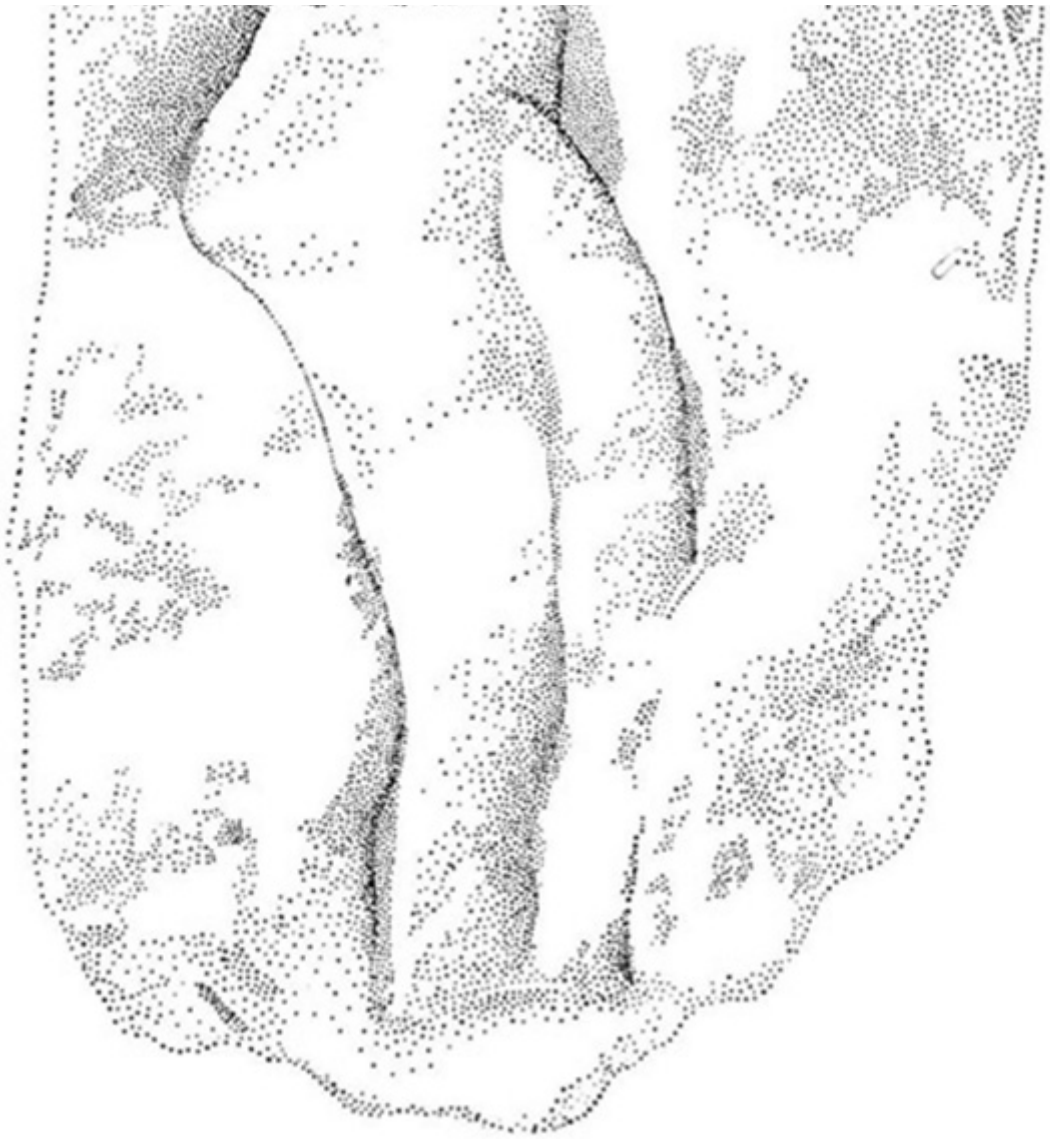
The relief of the standing man, Laussel

right

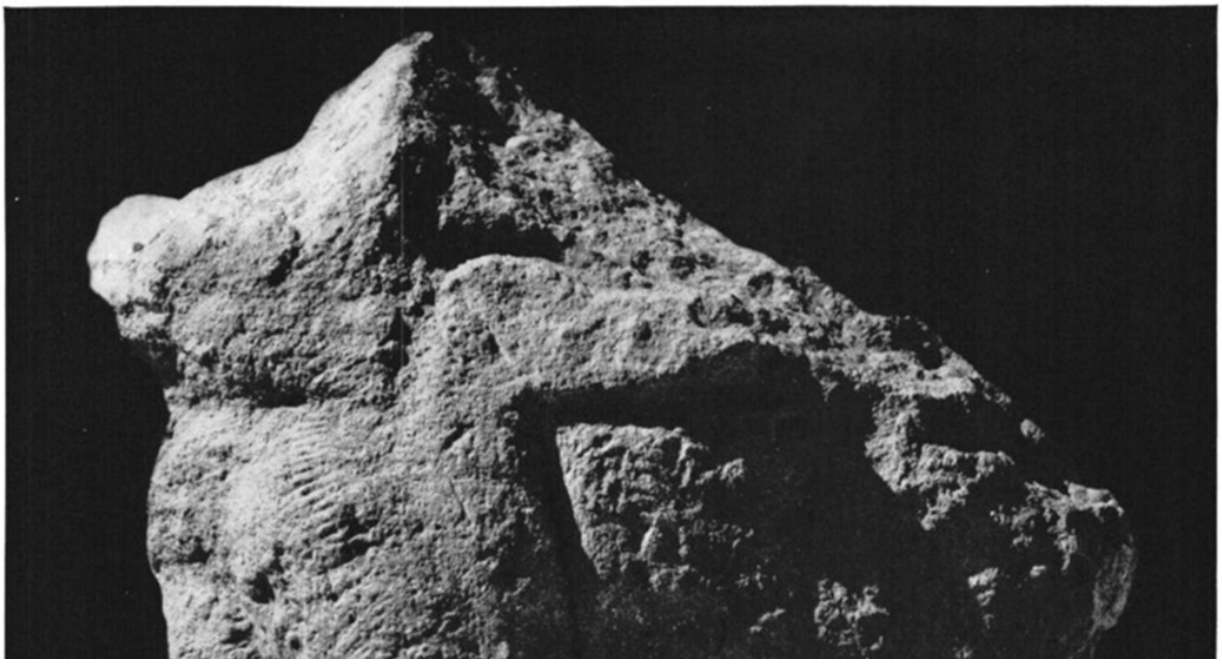
We may digress here to consider the male relief which Lalanne found near to the Venus of Laussel, “slightly above the Aurignacian levels” (1921, pp. 142–45). It also is now in the Charon collection, at Bordeaux. The upper part of the body is turned to the right with the left shoulder advanced —a posture today called the boxer’s stance (in contrast to the fencer’s stance). The outstretched left arm is still partly extant, but only the stump of the right arm is indicated. Lalanne saw him as an archer; the Russian Zamjatin, who, from different elements of the Sanctuary of Laussel, reconstructed a kind of hunting scene in the manner of a nineteenth-century genre painting, considered the standing man to be a spear-thrower (Hančar, 1939–40, p. 151) . It is unimportant in our context whether he was one or the other; probably he represented neither.

The head, in profile, has been damaged; it was probably never completely executed. The upper part of the body, in a three-quarter turn, has the right side of the chest lightly modeled and the lines of the thorax indicated as well as the navel, as is most carefully described by Dr. Lalanne. Two deep horizontal lines across the hips, indicating a girdle, are most conspicuous.

The lower part of the body, with the right leg slightly advanced, is in profile, like the head. In contrast to the female figures of the period, with their squat, heavily-built bodies, this narrow-hipped male figure is remarkably slender. Its outlines are incised with a firmness and sensitivity otherwise found only in the representations of animals.



Drawing for fig. 319



319. LAUSSEL: *Relief of the standing man* (*47 x 25 cm.*)

320. LAUSSEL: *Detail of the upper part of the "Venus of Laussel," the right arm raising a bison horn in the air*

482

In this relief of a standing man a new development seems to be inaugurated, destined not to be followed up in prehistoric art. Like the reclining female figures of La Magdeleine (Tarn), it is one of those precocious announcements of the human mind which, from time to time, emerge and then fade away. Its unique quality will be compared in our second volume with an Egyptian wood relief of Hesy-ra, one of the earliest realizations of the full power of Egyptian sculpture.

The standing man from the Solutrean period and the Egyptian relief from the Third Dynasty (around 2600 B.C.) are both depicted in the boxer's stance, with body turned to the right and left shoulder advanced. Both have the head and the legs shown in profile. Both are naked, except for a girdle, a feature often preserved in solemn rituals from prehistoric times. In Mesopotamia the priests entered the presence of the deity completely naked, except for a narrow girdle similar to that worn by the standing man of Laussel.

The female figures at La Magdeleine

481, 482, 479

For the Magdalenian era, the two large female figures at La Magdeleine (Tarn) are in their way unique just as the Venus of Laussel is for the foregoing period. Now, however, all physical robustness has disappeared. The figures lie, light as a breath, upon the rock face. They are so delicately modeled that they continually elude the eye, and it is easy to understand that they lay unnoticed by the generations of prehistorians who excavated at the entrance to the cavern (Bétirac, 1954, pp. 125–26). A classic Magdalenian engraving of a horse is situated immediately above the excavated area, but it was only in 1952 that the female reliefs were discovered by the keen eyes of an engineer who had been building roads in the Sahara Desert for more than twenty years. H. Bessac first recognized the left-hand figure, then the right. What first caught his eye was the deeply cut, geometrically formed sexual triangle of the left-hand figure; after this he was able to follow her outlines, and then see the companion figure on the right-hand wall.

321. LAUSSEL: *The block hewn from the rock face, showing the head of the "Venus of Laussel" reclining as though on a cushion*

322. LA MAGDELEINE (*Tarn*): *Entrance to the cavern. The two female figures, not visible here, are engraved in the dark part, to right and left. The horse is in the foreground on the right wall*

Some flickers of daylight penetrate even into the farthest recesses of the little cavern of La Magdeleine. To reach it one must drive from the village of Penne beside the Aveyron River for several miles along dirt tracks to the house of the owner of the cavern. From here it can be reached in a few minutes.

What seems so strange about these figures is their unusual pose, which is very unlike an idol's. Both figures lie stretched out in positions of utter repose, one arm bent and supporting the head. They arise from the rock as "foam-born" Aphrodite arose from the sea.

The approach was the same as when carving an animal figure: the sculptor saw the forms in the rock and had only to bring them forth. Bessac showed me how the entire thigh and curve of the back of the left-hand figure existed as a natural rock form, and he suggested that it was this form which first excited the interest of the artist. In both figures the slender body lies stretched out at full length, the upper part slightly raised, the head resting on one of the arms. The faces are indefinite: they do not exist. This iconographic peculiarity of prehistory is retained even here.

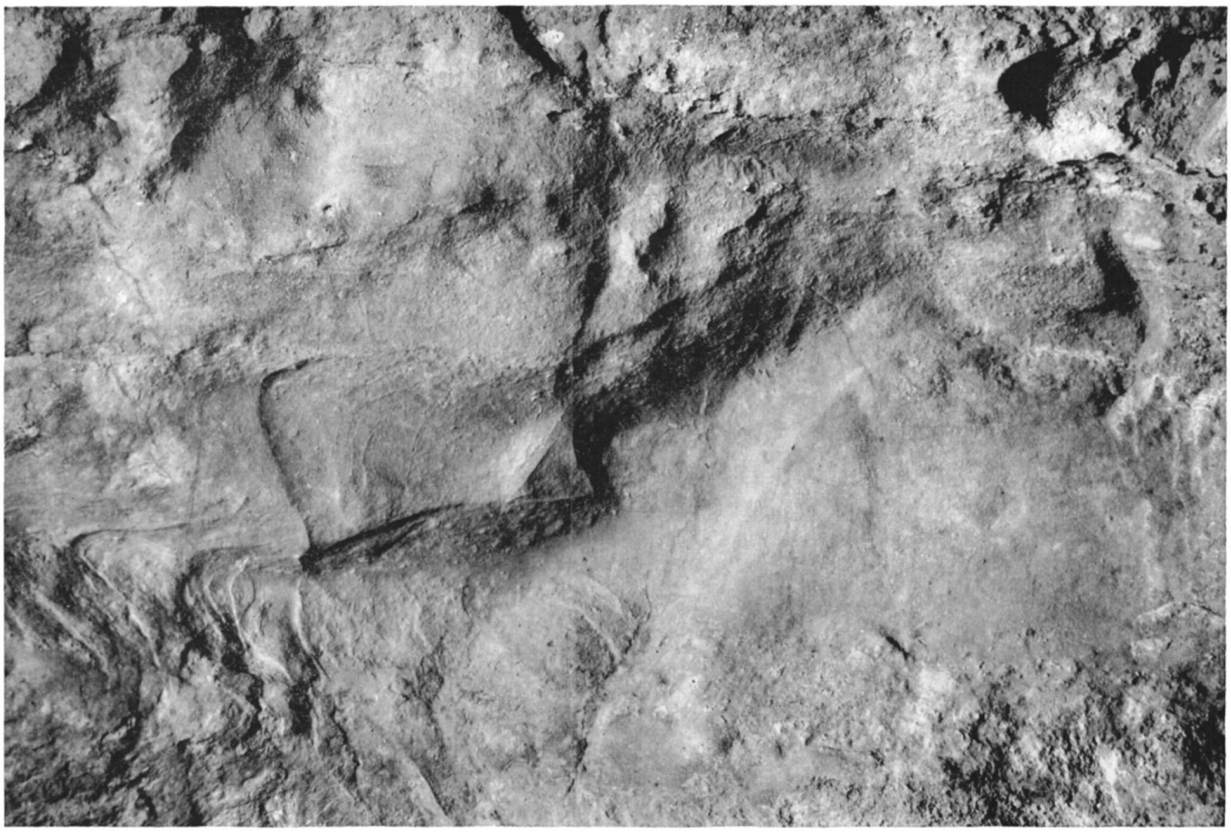
481, **482**

Both forms were exposed from the beginning to the direct effects of the open air and variations of temperature, and have suffered severely from the weathering of the rock wall. But their grace could not entirely be obliterated. The only part completely free from physical destruction is the more protected leg of the left-hand figure. An unexpected delicacy of line and an elasticity in handling the surface of the skin are here expressed, which are otherwise quite unknown in primeval art. The confronting figure is less likely to slip from view, though partly covered by exudations from the rock. The pose is very similar to her companion figure, except that she lies in a precisely engraved curve extending from her shoulder to her outstretched leg. A technique developed to depict animals — catching the essence of their form in a single line — is here applied to the human figure. Bessac recognized the use of natural rock forms for the right hip, the buttocks, and possibly the belly.

323. LA MAGDELEINE: *Engraving of the horse at the entrance to the cavern*

Drawing for fig. 325

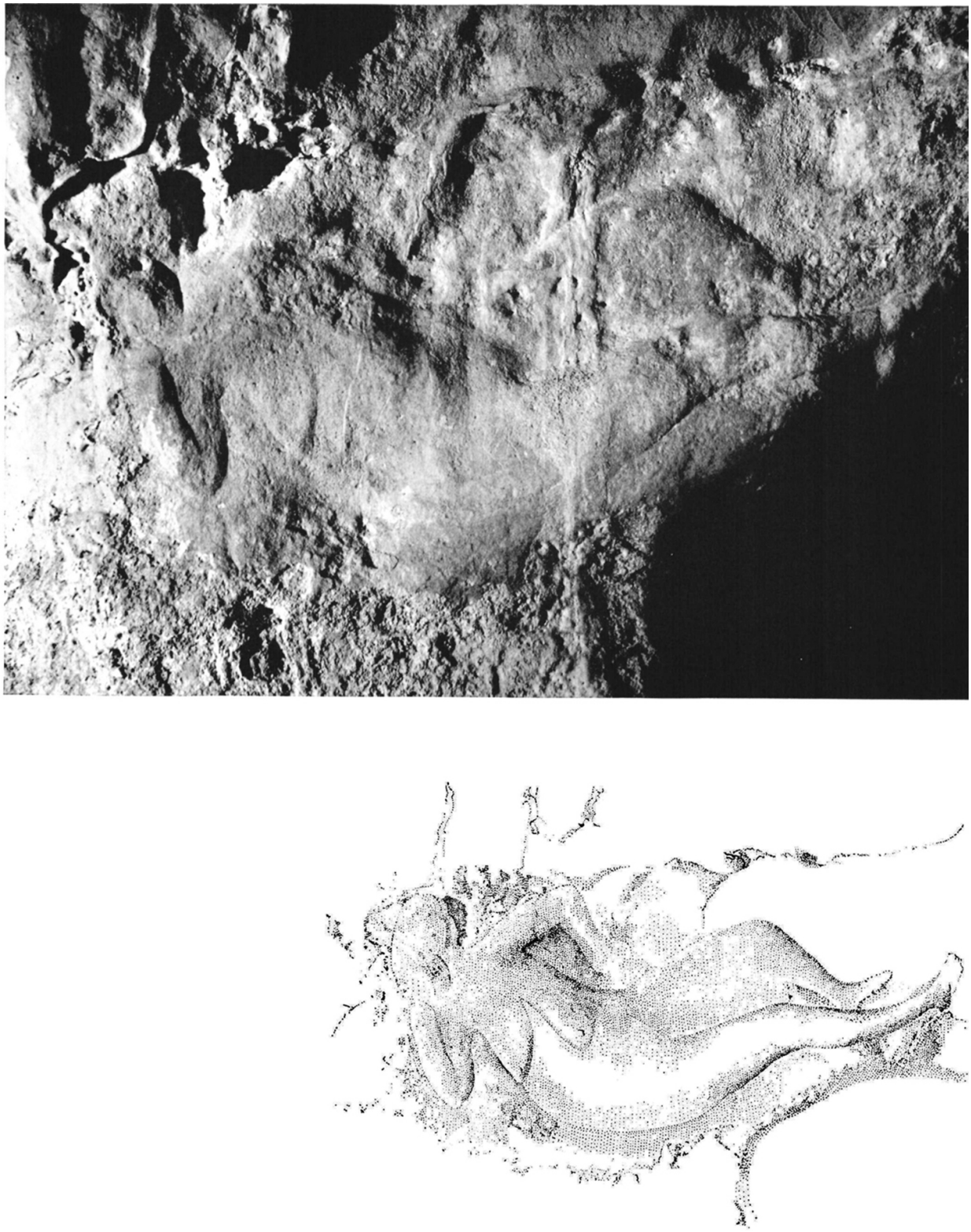
324. BABYLON, *Parthian period: Reclining woman, alabaster. Though Hellenistic in quality, these nudes retain the primeval accentuation of the pubic triangle*



325. LA MAGDELEINE: *Reclining figure of a woman on the left wall of the cavern*

A new ideal form of the human figure was here announced: a long-legged, slender figure with smaller breasts. It can only have persisted for a short hour. Development followed a radically different direction. But, as in nature, art has sometimes put forth strangely premature blossoms which are condemned to perish. One can but guess at the real significance of these indolently reclining figures, whose pose and way of representation are unique in primeval art.

Could they somehow be an anticipation of the reclining Artemis figures of antiquity, which expressed that deity's manifold attributes: mother-goddess, moon-goddess, ruler of the animal world, goddess of love? In the section on fertility symbols one aspect of this complex goddess is discussed. Were they direct forerunners of the reclining moon-goddess of antiquity? It would be absurd to consider any connection with prehistory: even so, the thought cannot be suppressed that what here occurred in the full flower of the Magdalenian period was an incomprehensible foretaste of much later ages.



326. LA MAGDELEINE: *Reclining figure of a woman on the right wall. With drawing*

480

From the Parthian period (3rd or 2nd cent. B.C.) come several small reclining nudes, found in Babylon. Their attitude, their Phrygian headdresses, and their red-crystal eyes

all portray the leisurely elegance of the Hellenistic era, but in one detail they preserve the style of primeval fertility figurines; the strong accentuation of the pubic triangle.

From sixteenth-century France come the long- and slender-legged Dianas of Benvenuto Cellini and Jean Goujon. In Cellini's lunette relief of Diana and the animals, known as *The Nymph of Fontainebleau*, both Gothic and Mannerist experience are combined, but the female figure, in low relief, has the same lazy, outstretched pose, confined in a single curve, with head supported on the arms, and the same long slender outstretched legs, that had been conceived for the first time by a Magdalenian artist.

327. LA MAGDELEINE: *Detail of upper part of the right-hand figure*

The female figures at Angles-sur-Anglin

The reliefs of the three nude female figures in the Abri Bourdois at Angles-sur-Anglin (Vienne; discovered in 1950) grow directly out from the rock face (illustrated in Breuil, 1954, p. 334). Their relevant aspects have been brought out in the section on fertility symbols. They in no way attain the artistic quality of the Venus of Laussel or the two figures from La Magdeleine.

MASKS AND HYBRID CREATURES

275 ff

Some earlier remarks on rites and rituals, the mystical experience, and the sacred and the profane can now be resumed. Masks, hybrid creatures, and indeterminate beings are manifestations of man's first attempts to give form to religious concepts. These bizarre creatures can give us some idea of early man's inner life and his approach to the supernatural.

ON RELIGIOUS CONCEPTS IN PREHISTORY

Common to all religious concepts is the belief in supernatural invisible powers upon which man is dependent. This dependence is expressed in the destiny to which man is subject: before his life begins, during it, and even thereafter. Every religion aims to create a hovering bridge, a connection, with this intangible force that is so much more powerful than man. What distinguishes one religion from another is the form of its approach to the supernatural. This differs widely.

How was this relationship to the supernatural expressed in prehistory?

Here we face the danger that no one is able to free himself entirely from the concepts of the present time — with all the complications which correspond to a late stage of development — and to project himself back into prehistory. In the field of art such preconceptions include notions of optical perspective and naturalism. In the field of religion it is just as dangerous to attribute current religious concepts to prehistoric manifestations, such as to interpret the Mousterian cult of the skull as a form of sacrifice to God. Monotheism owed its beginnings to certain complicated mental concepts which appeared after the creation of the anthropomorphic deities. Supernatural powers and human dependence upon them were as real for primeval man as they are for primitive peoples today. What is so difficult for us to grasp is the inseparable interlocking of matter with its spiritual content. Concepts of transcendentalism, by which matter can be regarded apart from its spiritual attributes, had no part in prehistory. This explains the ambivalence of prehistoric notions of the sacred, embracing both the pure and the impure.

The animal, which must be killed in order that men may live, is at the same time a part of the cosmic community. Every action must be taken which will ease his re-entry into life. Man also does not cease to exist after he is dead. But he must still be cared for.

The dead continue to take part in life, even to the sharing of meals with the living. Evidences of this belief appear in the Aurignacian age and extend until shortly before the opening of historical times. Men buried their dead as close as possible to their dwelling places— within their rock-overhung *abris* (La Ferrassie) and, later, beneath the floor of their huts (Hassuna, Mesopotamia; Merimdeh, Egypt).

Just as the space conception of prehistory did not separate above and below as rigorously as was done later (after the acceptance of the vertical as an organizing principle), so in the religious conceptions of prehistory material objects and their spiritual content were inextricably interwoven. This is the basis for the approach to religious concepts in prehistory.

Antennae and intermediaries

Invisible powers existed. They were given no transcendental form. They had a real existence in certain intermediaries who possessed a special power to effect an approach to them and who were therefore endowed with special sensitivity. It is impossible to say with certainty how far the shamanistic practices of the circumpolar peoples (whose culture most nearly approaches that of the paleolithic age) reflect the customs of prehistory. But it is difficult to imagine otherwise, once one has discarded any radical line of separation between the now and the hereafter in prehistory.

The "sorcerer" of Les Trois Frères and the man with a bird head in Lascaux, among others, are representations of men who, like the shaman, are both outwardly and inwardly better endowed to make contact with invisible powers than the ordinary man. They serve as antennae reaching out to the supernatural.

Longing for the form of an animal

492, 497

There are several prehistoric representations of figures with human faces. Only a few seem to us to be shown with an undistorted profile; e.g., two small Aurignacian heads — one from Dolní Věstonice (Czechoslovakia), the other (with hooded head) from Brassempouy (Landes), and a few engravings. Elsewhere, when the human head is shown unveiled it appears grotesquely distorted, like the isolated rock engraving in Les Combarelles (Dordogne), the small grimacing faces in Marsoulas (Haute-Garonne), the figures in La Marche (Vienne), and others. If one glances through the long sequence of prehistoric figures which E. S. della Santa has presented almost in the form of a catalogue (1947), one seems to behold a desire to appear as much like the revered animals as possible, to imitate them and to take on their nature.

458, 497, 465, 509, 505

This comes out in the posture of the human figure. Human beings are constantly depicted with their bodies almost bent double and nearly crawling, the moment that they

come near to one another. This can be noticed at Les Combarelles and the Abri Murat (Lot), in the headless Magdalenian female figures at Cougnac (Lot) and La Roche (Dordogne), and also in the clay drawings of the bird-headed female figure on the ceiling of Pech-Merle (Lot). In a certain sense the "sorcerer" at Les Trois Frères can also be included in this category.

497

With few exceptions, the human profile has been changed: the forehead slopes backward, the jaw is elongated and projects forward almost like a muzzle, and the chin — so typical of man — is often nearly suppressed, as in the "sorcerer" and the "man with coiffure" from La Marche (Vienne). This way of depicting the human visage appears grotesque to our eyes but was hardly so in the eyes of primeval man. It is unlikely that caricatures would be placed in a sanctuary.

Hybrid forms predominate. All have human bodies and animal heads in contrast to the mythological hybrid figures of Greece which bear human heads upon animal bodies. It has recently been emphasized, and rightly, that "the great part of the representations [of the human body] found in paleolithic art are hybrid or semianimal. All have a tendency to avoid defining the human form, leaving it in an undeterminate state, and, above all, trying to hide or to transform the face" (Ripoll Perelló, 1957–58, p. 172). We must agree further with Ripoll when he states: "The artist was governed by a powerful inhibition which kept his hand from reproducing the human being in a form which would be immediately recognizable" (p. 172).

MASKS AND REALITY

The absence of metaphysical concepts in prehistory was countered by the animation of matter (in the assumption that representations of animals had life) and in the role of the potent symbol.

For many years prehistorians and archaeologists have been disputing whether the figures with curious animallike heads upon humanlike bodies wore masks or represented hybrid creatures. The question around which this discussion turned is unquestionably fundamental for the understanding of the attitude of primeval man toward the supernatural. Its various phases have been carefully recapitulated by della Santa (1947) and Ripoll Perelló (1957). Only a few brief notes are included here.

The opinion that masks existed in the upper paleolithic period was put forward in 1906 by Breuil and his friends and has been adhered to since then. This view was persistently opposed by G. H. Luquet, who, with his positivism, stressed in 1910 that there was no "preuve irrefutable" of the existence of masks in paleolithic times: the representations nowhere showed any means by which masks could be fastened on. This

is true, but the question whether masks actually existed or not is less important today than it appeared then from a rationalistic point of view.

It is possible that these opposing views can now be brought together, even if they cannot be fully resolved: masks or no masks is not any longer the decisive problem.

Masks, to us, connote dissemblance and disguise: something incidental and external. But to primitive peoples and to paleolithic man they belonged to the realm of existence and reality. They form a part — indeed a very significant part — of the primeval concept of the world. One of the impulses leading to their genesis sprang from a need to take over the forms of certain beings, whether to gain increased power by accumulating the special qualities of various creatures or to possess simultaneously different features, such as in the masks of contemporary primitives: e.g., the multiple masks of the Kwakiutl Indians of the Pacific Northwest, which could go through several transformations. In the case of a mask representing the sun "manifested as a hawk-human being, . . . when the strings are pulled, the outer rays fold into the tail of a killer whale. . . . Furthermore, the animal painted on the whale's tail is a stylized wolf, the terrestrial manifestation of the killer whale" (Woodcock, 1954, p. 113).

The transformations are not mere appearance, they are real and actual. The man wearing the mask "is the being depicted by the mask . . . and at once becomes another being when the mask is opened up and the inner mask comes into view. . . . The actions played out by those wearing the masks have not merely a symbolic character but are considered as absolutely real. It is not the magic of analogy [*Analogiezauber*] that is presented, but it is the demons themselves who appear and perform what the men want from them; and this act of theirs guarantees success to the men" (Krause, 1931, pp. 355, 356).

Heads in the rock, Altamira

490, **491**

Behind the tectiforms, at the point where the cavern of Altamira comes to an end, stand two blocks which form part of the rock wall. They are separated by a narrow cleft. Their shape must have attracted attention, for the germs of two faces were seen in them. All that was then necessary was to place two circles for the eyes, a flamelike sign close to what seems the mouth of the left-hand one, and two eyebrows upon the right-hand one, as well as to outline the lower part of a noselike form in the rock.

Are these an outcome of the imagination: heads which never existed in nature? Or, as Breuil and Obermaier believe, does the right-hand head represent a bison and the left-hand one with the flame-like sign a wild boar? (1935, p. 53.) It is difficult to take any positive stand. The forms already secreted within the rock blocks led to forms of fantasy. These two heads are unusually large for paleolithic times (60–70 cm.) and fall within the wide-flung category of ideal animal-men.

Fantastic head upon a human body, Les Combarelles

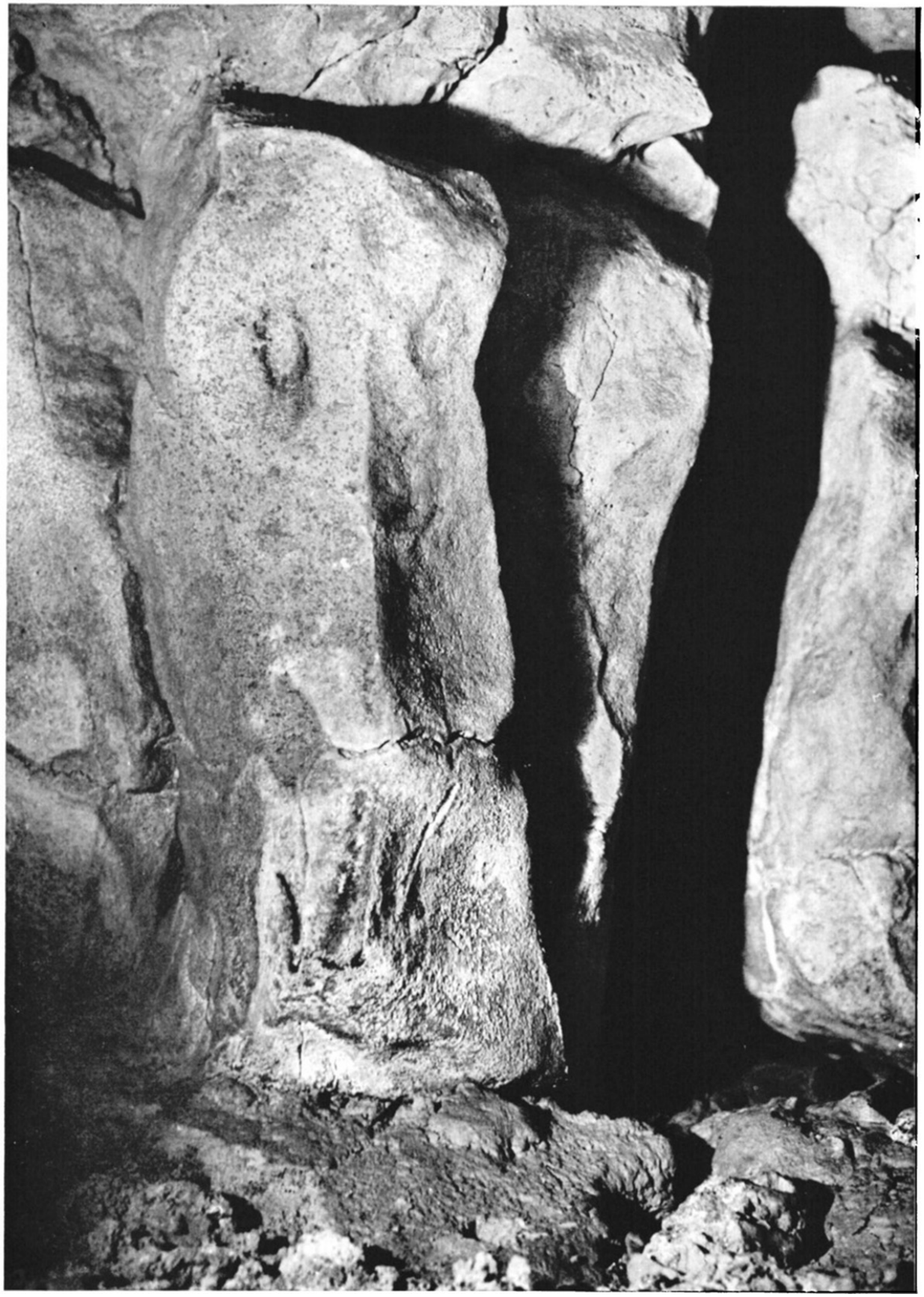
492, 493, 188

The cavern of Les Combarelles contains several hybrid figures: human bodies with fantastic heads. Like other hybrid figures, they bear no signs of the fastening on of masks. Perhaps the most impressive of the figurations at Les Combarelles is a head engraved with a deeply cut outline. Only the head is developed, the body being treated very casually. Breuil suggested that it could represent the body of a female, and gives a penetrating account of the head of this forward-leaning figure: "The skull is short, and small, with an angular crown and low but bulging forehead . . . a prominent curving nose and strongly marked flaring nostrils. The chin recedes, the mouth is very large" (Capitan, Breuil, Peyrony, 1924, p. 92). These are such words as inevitably are used to describe heads of this kind: an outstanding example is a sculptured head from La Ferrassie with the symbol of a vulva on the back.

HYBRID CREATURES

308, 327, 376, 219

From the earliest beginnings of artistic representation it would seem part of the nature of man to invent creatures more powerful than those in existence. Legendary creatures were brought into being even in those remote times. One of the earliest instances known is a gigantic serpent with the head of a carnivore limned upon the wall in colored clay. Among others in this category are the Aurignacian composite animal of Le Combel at Pech-Merle — a lioness, three gazelles, and a rhinoceros; the Solutrean composite animal of Le Roc de Sers (Charente) — a bison with the head of a sow; and various hybrid animals from Les Trois Frerès (Ariège). The tradition continued on in such forms as a copper stag with silver mask from Alaja Hüyük (Anatolia), in the second millennium B.C. Creatures with human bodies and animallike heads belong to the same category.



328. ALTAMIRA (*Santander*): *Masklike head in the rock wall at far end of cavern*

329. ALTAMIRA: *Head in rock at left of foregoing, with flamelike sign*

330. LES COMB ARELLES (*Dordogne*): *Isolated humanlike head with staring eyes. With drawing*

Drawing for fig. 331

331. LES COMBARELLES: *Fantastic head upon human body*

The invention of beings which have no existence in nature responds to a desire for contact with imponderable powers.

116

It is well to be careful about relating these imaginary creatures to the concept of demons as early as the Perigordian or Magdalenian periods. It becomes possible to speak of demons in the sense understood today only in the final phases of the neolithic period, or even later: e.g., the human-faced demons of Monte Bego.

332. TERME PIALAT (*Dordogne*): *Two personages, one following the other*

It will be noted that masks and hybrid creatures merge into one another. They are separated here only for convenience of presentation. It is the same with animal- and bird-headed hybrids. These creatures evade zoological classification.

All prehistoric hybrid creatures have in common a simulation of the animal and, dominantly, a long-drawn-out head. Among the animal-headed hybrids it is usually the snout — the muzzle — which determines the form of the skull; certainty as to whether it represents the head of a bison, a horse, or an ibex is seldom possible. Fantasy again and again effaces scientific order.

This is even more striking among the beaked or bird-headed beings. It was only in later periods that the choice fell upon a specific species: the Horus falcon in Egypt as incarnation of an anthropomorphic god or the raven in Scandinavian mythology. This was bound up with a specific mission that the bird was expected to fulfill. Nothing of this can be proved for prehistory. Bird-headed figures, like all the others, were corporeal antennae, able to make contact with what, for ordinary man, was unattainable.

Two personages, one following the other, Terme Pialat

left

This relief from a Dordogne site, on a block of limestone in the museum at Périgueux, has deeply engraved outlines. The fragmentary condition of the block makes it uncertain whether the relief represents a man and a woman, one following the other as is usual when two people are presented in juxtaposition. Only the female figure to the left (14.5 cm.) is clearly defined. Its large balloonlike head is undetailed. There are no arms. It is a rather mediocre relief in which only the paired juxtaposition of the figures is of interest (Délugin, 1914, pp. 3–11).

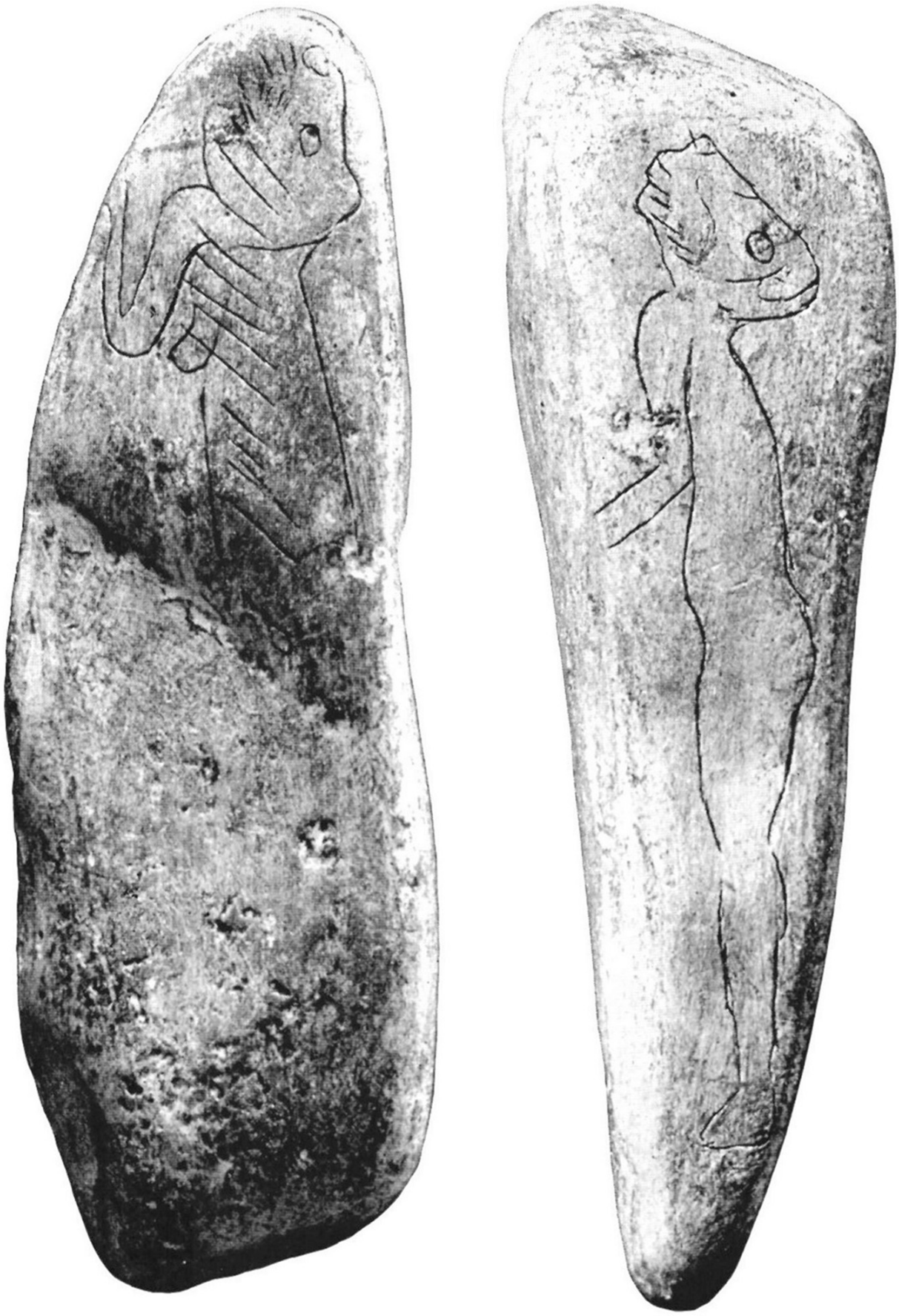
Male and female figures, La Madeleine

496, **497**

By far the most unusual way of representing one individual following another is to show them as hybrid creatures: e.g., an Aurignacian pebble from La Madeleine (Dordogne) depicting a man and on the reverse side a woman, both with upstretched animal heads, or a Magdalenian bone engraving from the Abri Murat depicting a woman with a birdlike head following after a man.

On the engraved limestone pebble from La Madeleine (now in the museum at St-Germain-en-Laye) it does not appear, from our point of view, as though the man and woman are in fact in a sequence, since one figure is engraved upon either side of the stone, and they are inverted, head to foot, as the illustration shows. These differences were not perceived by prehistoric man.

In both figures the greatest attention is paid to their grotesque upstretched heads, with a typically receding line of nose and forehead and an emphasized line of the throat (Capitan, Breuil, Peyrony, 1924, pp. 113–14).

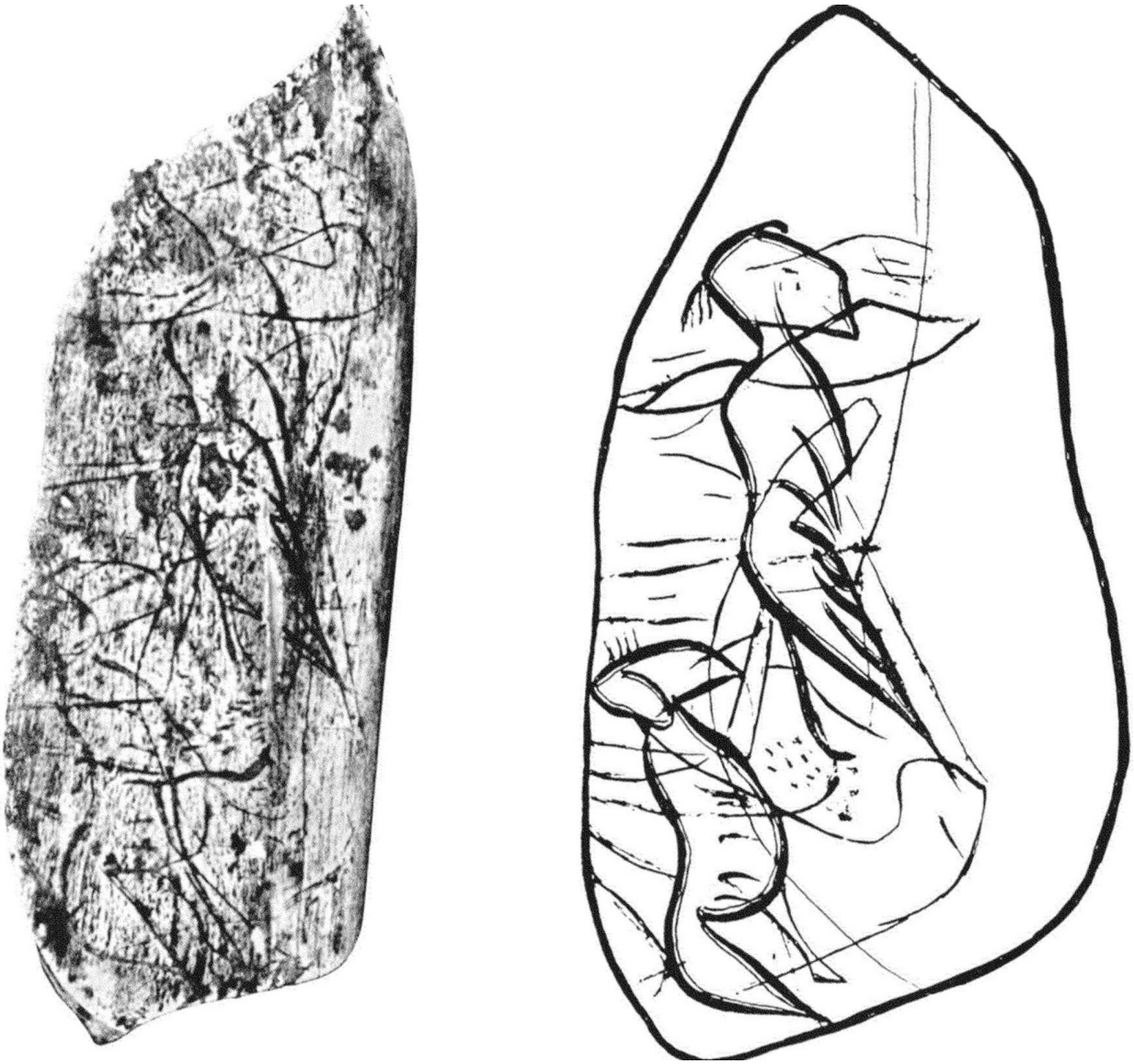


333. LA MADELEINE (*Dordogne*): *A female and a male figure, each with upstretched head, engraved on two sides of a limestone pebble*

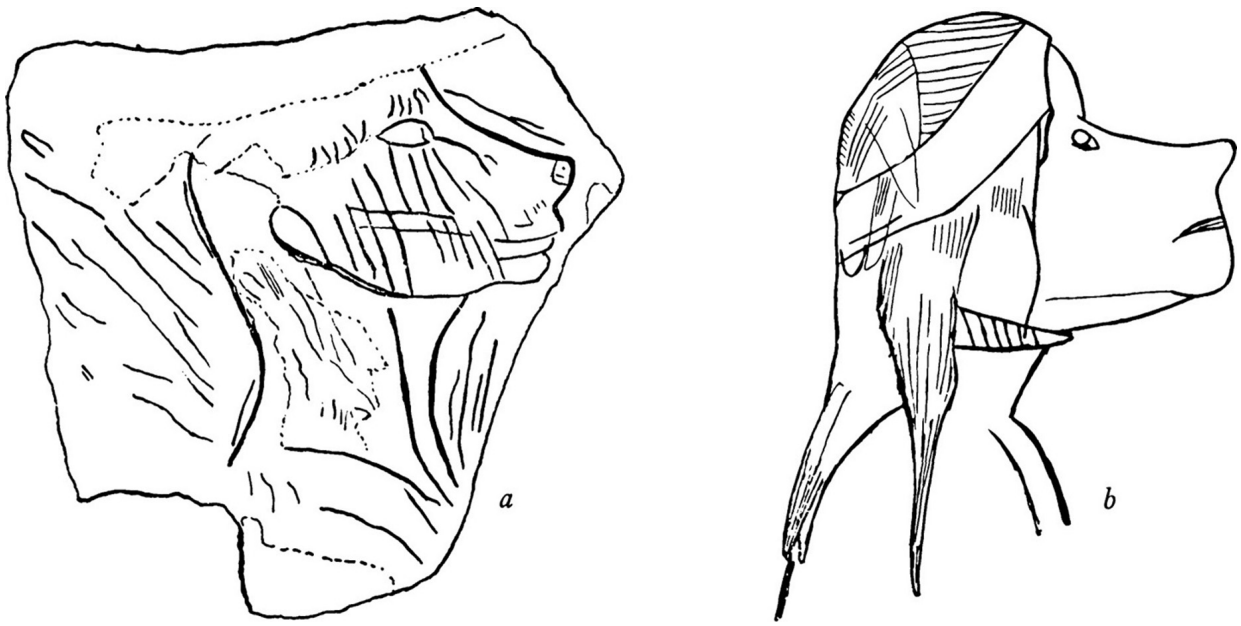
Human figurations, Abri Murat

right

An engraved bone (7 cm.) from the Murat shelter (Lot) in the museum at Cabrerets shows "to the left a woman, bent very much forward, the body greatly elongated, the nose flattened, breasts strongly marked, hands directed towards the man, who, turning his back to the female representation, is crawling upon all fours in an ithyphallic attitude" (Lemozi, 1937, p. 668). This description by its discoverer again brings out the simulation of the animal both in the form of the heads and in their doubled-over posture, particularly in the case of the man.



334. ABRI MURAT (*Lot*): *Engraving on bone, showing man and woman, one following the other. With drawing by Lemozi*



335. LA MARCHE (*Vienne*): *Male heads engraved on stones: a) "sorcerer" ; b) with coiffure, Magdalenian III. Drawings from Lwoff, 1940*

Human figure with upraised arm, Hornos de la Peña

500

A gallery of this out-of-the-way cavern in Santander, whose singular animal drawings have been referred to several times, becomes so low and narrow that eventually one can only sit in a crouched position. At this point is a hybrid figure which has been called "el mono" (the ape). Breuil (later, Obermaier) counters this attribution on convincing grounds: "Before one's eyes is one of the most singular figures one could imagine. . . . The being pictured here stands upright on his lower limbs, his body bent slightly forward . . . his thighs extremely slender" (Alcalde del Rio, Breuil, Sierra, 1911, p. 97).

The termination of his upraised arm is uncertain. His animallike head has a flattened profile. "No sexual attribute," Breuil remarks (p. 98), though later Obermaier noted his barely visible ithyphallicism. This would concur with the attitude of other similar figures.

What immediately impresses the observer of "el mono" is the arresting gesture of the upstretched arm. An unbroken curve runs from his chin to the tip of his hand.

The outline of this figure is delineated with three parallel lines, as though to mark the separation of body from the skin cape, which ends in a tail. Is this pelt simply thrown over the body, or have we here a completely hybrid figure? The engraving gives no definite indication —possibly the maker wished to give none.

Red figure with snarling mouth, La Pasiega

501

Only the head of this figure from a Santander site and part of the line of the chest are accentuated. The skull is drawn with a broad red line, deeply engraved. The only pronounced feature is a huge and snarling mouth. Above the head are two curving black horns; between them, three vertical strokes, similar to the diadem of the lioness at Le Combel, Pech-Merle. It is possible that these fragments mark all that remains of an Aurignacian bison. In any case, it was not by chance that this later red figure was placed here and that it has acquired so striking a crown.

It would be hard to express in fewer strokes a more appalling and fearful apparition. This kind of terror-inspiring form is very rare in prehistory. The head of this beast of prey, upon which all emphasis is concentrated, oversteps the limits of hybrid creatures and almost enters the realm of the demons of later ages.

Various hybrids of Les Trois Frères

The cavern of Les Trois Frères (Ariège), which was discovered in 1912 by the three young sons of the Comte Bégouën upon the family estate, contains in its sanctuary three very fantastic figurations. They display the vivid imagination of the high Magdalenian era, with its power both of inventing fantastic beings and of endowing them with a form. The same fine hair lines appear, as in the cavern of Le Gabillou. The drawings rest light as a breath upon the rock. It needed the keen eyes of the Abbé Breuil to disentangle them from a medley of other representations and bring them clearly to light. Various stages in the creation of hybrid figures are here exposed.

503, **502**

Bison-man with musical instrument: One of the hybrids (30 cm. high) is driving a curious herd of hybrid animals before him. He has the head of a bison with large horns; with human legs and animallike arms, he is dancing in an upright position. A hairy, tailed pelt is probably thrown over his shoulders, as in the engraving from La Pasiega. Most curious of all, he is playing upon a musical instrument. This has been described as "a long pipelike object, whose end meets the mouth of the bison mask. He is evidently holding it in the manner of a flute or other wind instrument" (Bégouën and Breuil, 1934, p. 118), but possibly it is "a musical bow, such as is still in use among African tribes" (Chailley, 1961, p. 1) . The company of animals that this seeming musician is herding is itself no less hybrid. One has the rear of a female reindeer and the forepart of a bison. In front of it is another female reindeer whose forefeet are indeterminate: are they, as Breuil queries, duck feet or human hands?

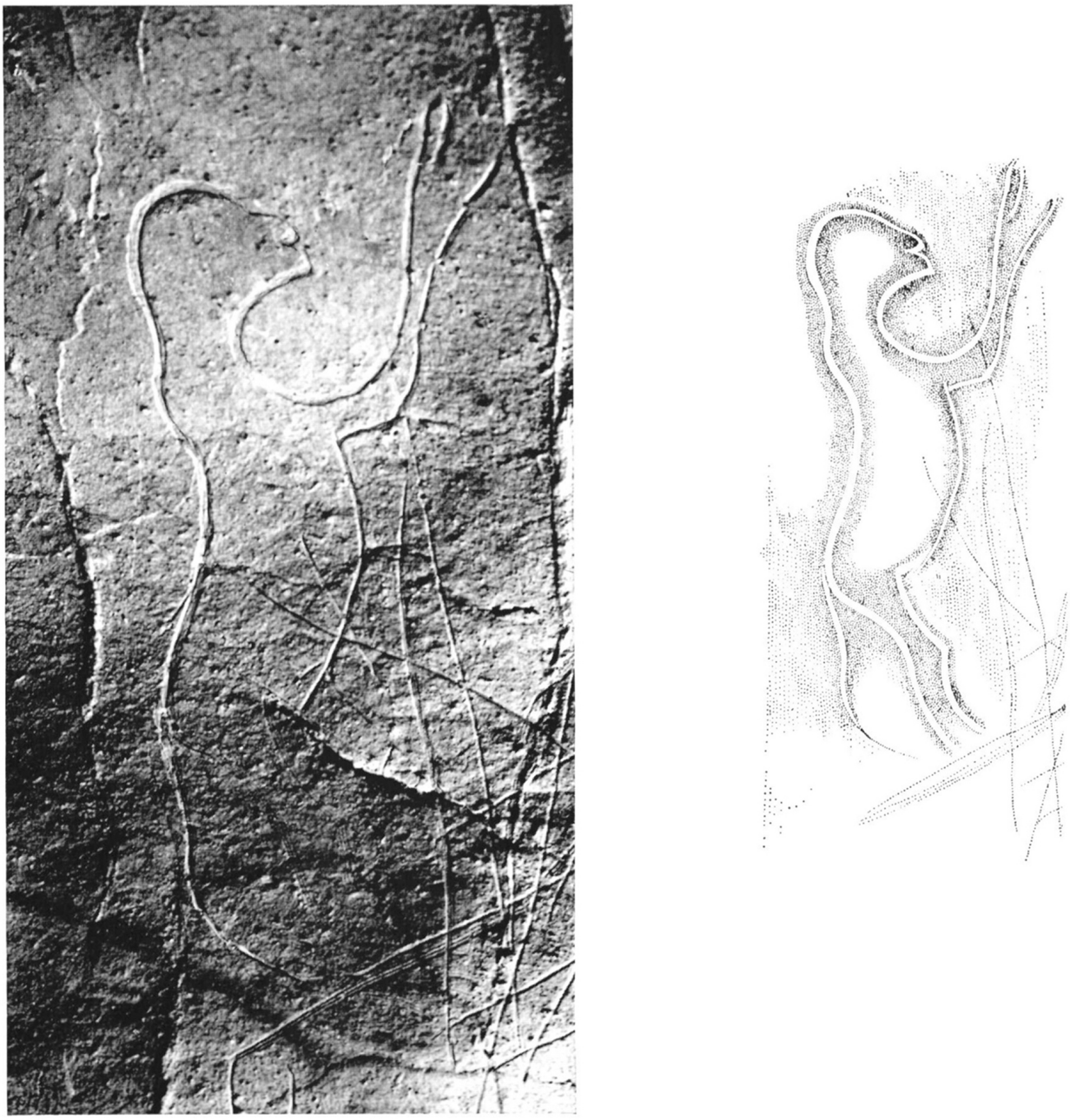
507

The greatly hybridized bison-man: Hardly a meter from this flute-playing hybrid is another being of the same order. Here the factor of indetermination has full sway. The imagination moves on without ceasing so that the figure is continuously changing from

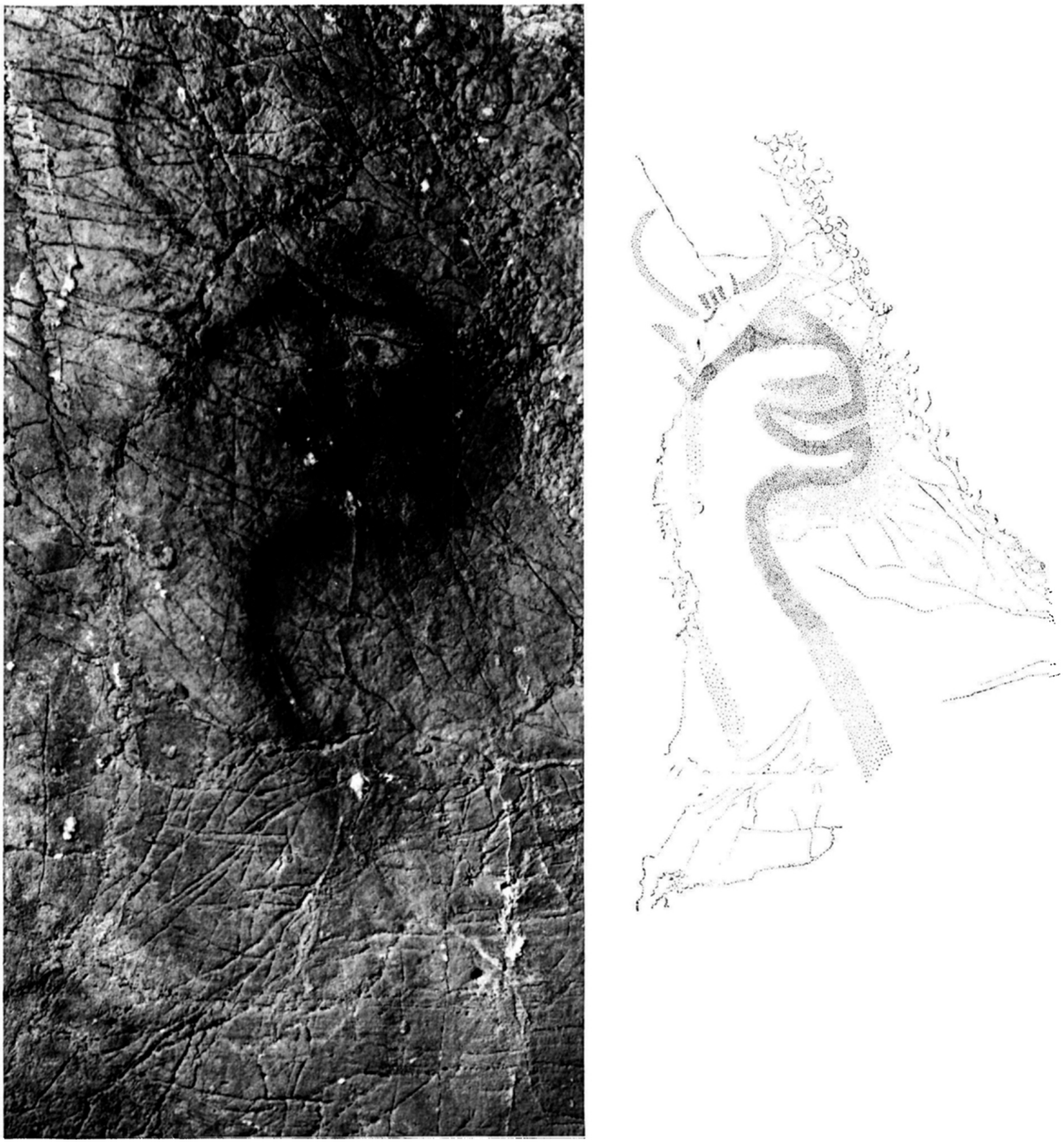
part to part, from limb to limb. The pelt is undoubtedly one with the body; the sharply back-turned head with rudimentary horns, large eye, nervous nostrils, and high humanlike forehead belongs to no known race. A fantastic composite being has arisen from the imaginative pairing of man and animal. Its front hooves are those of a bison. But "its powerful thigh is articulated with a definite knee, followed by a leg of the same nature. . . . This as well as his movements are those of a man and have nothing to do with a bison. . . . The male sex in erection is also that of a human" (Bégouën and Breuil, 1934, p. 119).

505

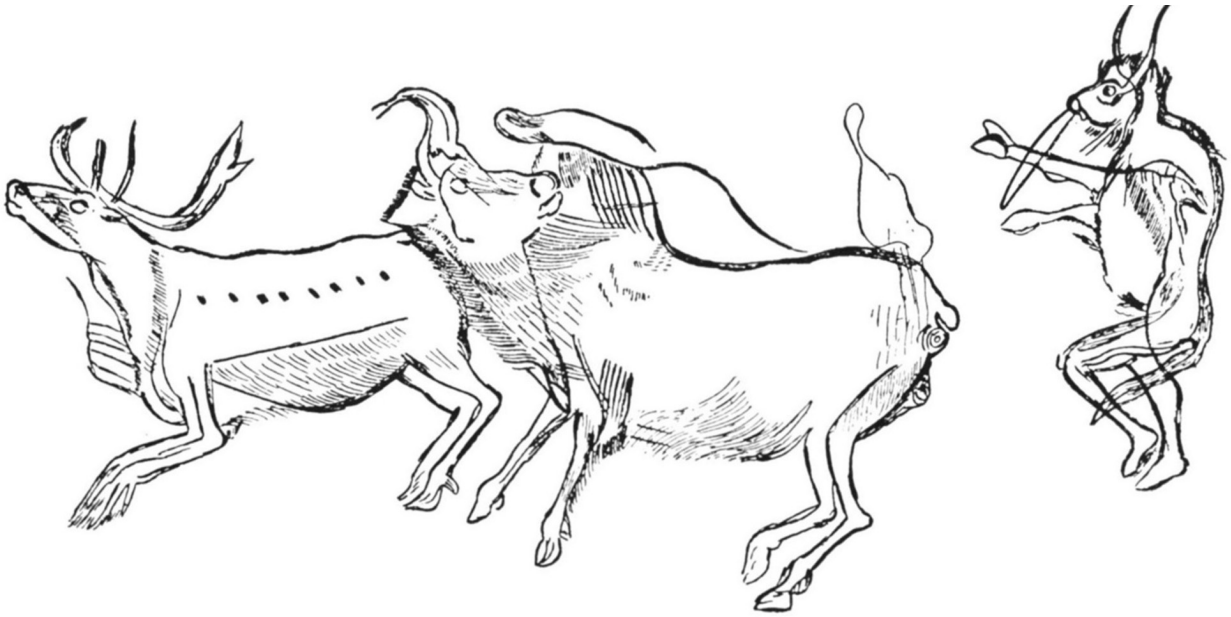
The "sorcerer" : The fluting hybrid figure and the bisonlike creature with a human knee, which is so far beyond the normal reaches of the imagination, are placed close to one another. In the same sanctuary, not far away but high up and placed freely on the rock wall, is one of the famous prehistoric figurations, commonly called "the sorcerer," but "a sorcerer endowed with the highest powers of magic" (Bégouën, 1926, p. 187). Bégouën continues, and here one can certainly agree: "The figuration is the most complete and the most carefully rendered of any known — a work of art equal to the most beautiful animal representations" (p. 187). From his difficult, almost inaccessible position on the rock face, the "sorcerer" dominates the scene, high above the medley of animals, seeming larger than he really is (75 cm.). He is performing a ritual dance of conjuration. His body is powerful and strongly hybrid in appearance. The head, crowned with mighty reindeer antlers, has two wolf's ears, a long thin beard, and — something rare in primeval art — two large staring eyes; the body has the tail of a horse, the front paws of a bear, and feet probably human, as are certainly the legs and body. The surface of the body is crossed with finely engraved lines, the spaces between them carefully tinted black. All in all, a work of great artistic compression.



336. HORNOS DE LA PEÑA (*Santander*): *Human figure with upraised arm. With drawing*



337. LA PASIEGA (*Santander*): *Red figure with snarling mouth. With drawing*

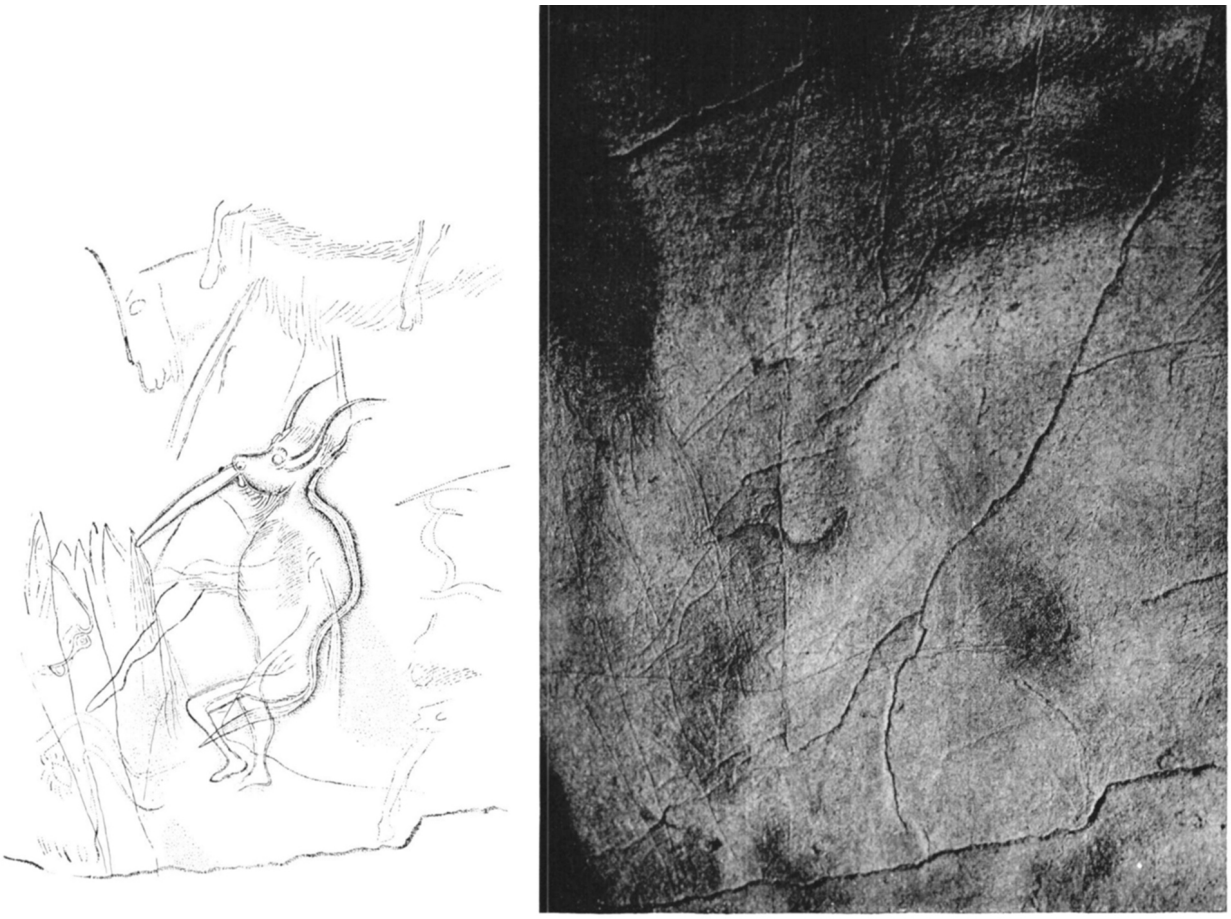


Drawing by Breuil (*cf. fig. 338*), *showing hybrid animals being driven by the bison-man*

504

A hint as to the meaning of this figure may be found in the apparel of a Tungus shaman of Siberia, as portrayed in a rare eighteenth-century travel book. We reproduce this from a copy in the Houghton Library at Harvard University (Witsen, 1705, p. 664). This shaman has stag antlers, animal ears, bear's feet, a fur garment; in addition a shamanistic drum and drumstick in his wide outspread arms with bear's claws; further, there are signs of a beard upon his unmasked face. The beginnings of shamanism have not been established. Could such close and detailed similarities of apparel have sprung from completely different sources?

Here again, as so often, intervening stages between these two objects of comparison are lacking. Relations with the first high civilizations are also lost in darkness, though some iconographic likenesses can be found in the figure in Les Trois Frères. The distinguishing attributes of the earliest anthropomorphic gods of Egypt as of Mesopotamia included a ceremonial beard and, especially in Mesopotamia, bulging, staring eyes; later also horns. These were developed in the transition from priests to anthropomorphic gods.



338. LES TROIS FRERES (*Ariège*): *The bison-man, possibly playing an instrument. With drawing*

Antecedents of all this imagery existed in the figure of the Magdalenian shaman of Les Trois Frères, although we know so little of the intervening links.

BIRD-HEADED FIGURES

509, 511

A bird's head upon a human figure is one of the most venerable mythological inventions. It appears in an early phase of the Aurignacian period: in the female figures at Pech-Merle. The female is the fundamental type; the male type came later, not before the Magdalenian era, as far as is known. The rigid figure of a bird-headed man from Lascaux, owing to the context in which it is placed, is a famous riddle. A whole series of finely engraved figures with beaked heads, both male and female, was recently discovered in the cavern of Addaura (Sicily).

339. TUNGUS TRIBE (*Siberia*): *Shaman with reindeer horns and drum. From Witsen, 1705*

Drawing (after Breuil) for fig. 340, showing antlers

340. LES TROIS FRÈRES: *"The sorcerer"*

Bird-headed female figures, Pech-Merle

509

From their primitive forms the female figures, often called "goddesses," on the ceiling of the Hall of the Hieroglyphs at Pech-Merle (Lot), belong to an early phase of the Aurignacian era. They are in any case earlier than the strongly plastic Aurignacian-Perigordian Venus figurines.

These “goddesses” are not placed high up in isolation. They are entangled in a thicket of other creatures: in other words, they are inseparably bound up with earthly existence.

An illustration shows one of these figures with a back-turned bird head and human body: rudimentary arms, heavy breasts, pregnant belly, strongly emphasized hips, and human feet. She is interlocked with the gigantic trunk of a mammoth, and when the placing of this figure is compared with later ones from the Magdalenian period, a difference from the earliest stage becomes apparent. The “sorcerer” at Les Trois Frères hovers high above the medley of animals and has sometimes been referred to as the “god of the animals.”

Dancing figure with beaked head, Addaura

In the little cavern of Addaura, high above the sea on the steep slopes of Monte Pellegrino, near Palermo (Sicily), an entire wall of engravings of human figures was discovered in 1953. In 1945, at the end of the war, as the result of a military explosion a layer of stalactites was split apart, revealing that the wall was covered with bird-headed dancers. The number of human figures engraved here and the clarity and elegance with which they are drawn are most unusual for prehistory.

510

In the center of eleven naked male figures is a dancer in active movement, with a long projecting beaked head and upraised arms. Its flowing lines and the assurance with which the turning body is depicted are unique in primeval art.

The assembly of so many figures in the late paleolithic age is exceedingly rare, particularly when related, as in this instance, to a ritual ceremony. As this probably represented an actual scene, it implies that the masked figures performed their ceremonies with ritual dancing, as among primitive peoples today. The purpose of this scene is difficult to unravel. A number of interpretations have been put forward. A. C. Blanc considers it to be a ceremony involving human sacrifice: the self-strangulation of one of the participants (1955, pp. 213–26).

Bird-headed shaman, Lascaux

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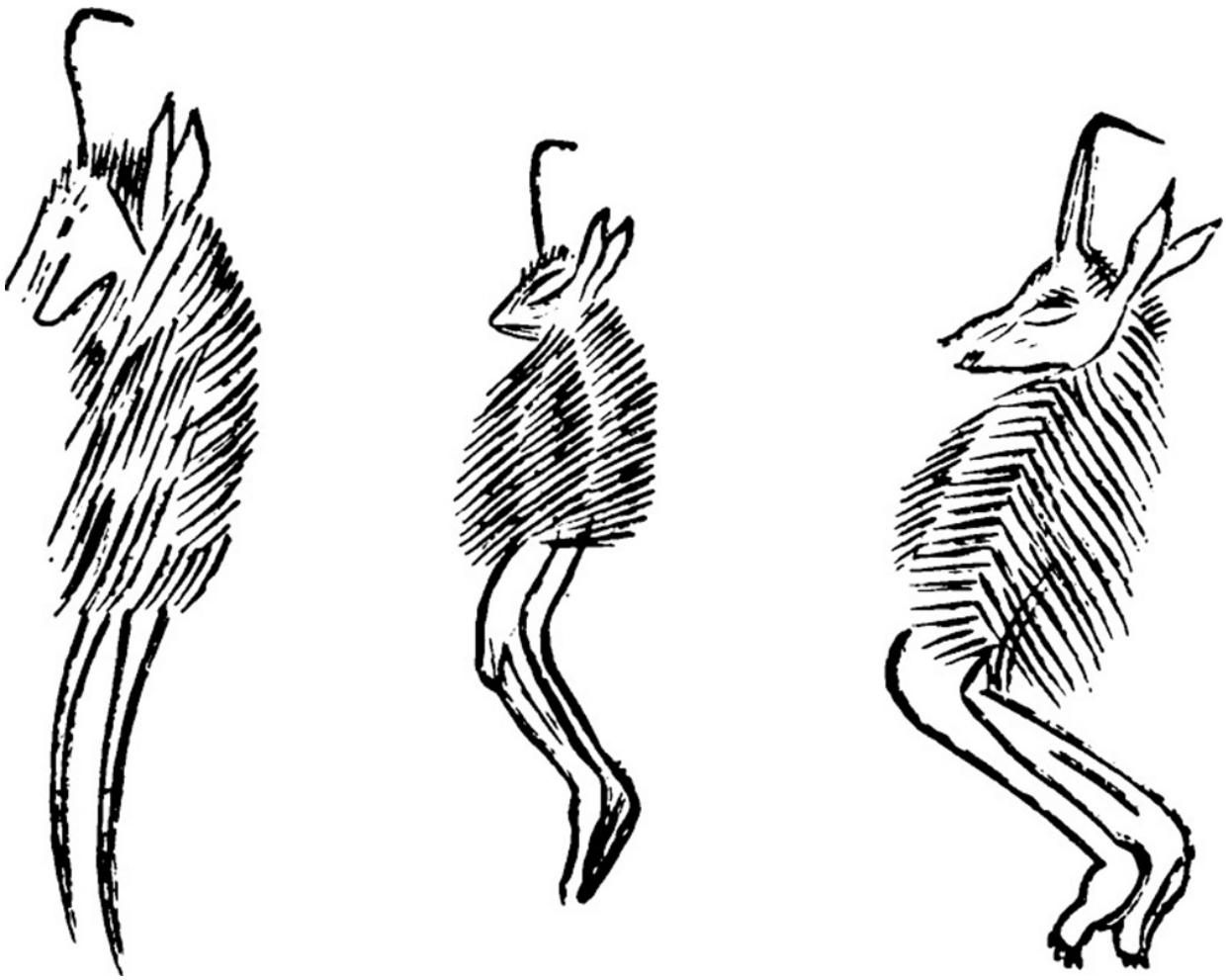
Few representations have excited the interest of scholars so much as the curious scene in the “well” of the cavern of Lascaux, which depicts a severely wounded bison, a naked man with a bird’s head, a bird upon a pole, and — to the left, not visible in our photograph — a rhinoceros trotting away.

The interpretation of this scene swings between two extremes. One is based upon a nineteenth-century point of view. This observes the scene as a genre painting, as the representation of a hunting accident in which the bison has wounded the man and the departing rhinoceros has wounded the bison. The other interpretation, which sees this as

a shamanistic spell-casting, with all its details, has been fully developed in a comprehensive treatise by H. Kirchner (1952, pp. 244–86).

Kirchner bases his arguments mainly upon the shamanistic rituals of the circumpolar peoples. It is doubtful, however, whether every detail of these rituals can be projected back into prehistory and whether one can go so far as to say that this is a "surprisingly realistic representation of a typical shamanistic 'seance' (spell-casting), with the shaman, his familiar spirit, and the sacrificial animal" (p. 254). In the main Kirchner's view can be supported on the grounds that a shaman is shown here in action and that the scene is permeated with the religious atmosphere of prehistory, especially the atmosphere of the Magdalenian period to which this scene is attributed on the basis of objects found later at this spot.

341. LES TROIS FRÈRES: *Composite being with bison-like head and human leg. Drawing by Breuil*



342. ABRI MÈGE, TEYJAT (*Dordogne*): *Hybrid figures with human legs, on a bâton de commandement (fig. 102). Drawing by Breuil*

Kirchner starts, of course, with the central figures of the scene — the naked birdheaded shaman and the bird upon a pole. The scene presents the moment when the shaman falls into "a deliberately induced trance. . . . His body sinks to the ground while he sends his soul on a journey to the heavens" (p. 254). Kirchner bases this on the "strikingly slanting position and rigidity of this human body," which seems to be depicted at the moment of falling backward in an ecstatic trance.

The prime and basic question is: is this man really falling over backward?

I share the opinion of S. Blanc, of Les Eyzies, former Inspector of Historic Monuments, that this bird man is in fact standing upright at the moment of supreme exaltation. One arm, with a four-fingered hand, points toward the bird on a pole, the other points toward the collapsing bison with its spilling entrails. The man is ithyphallic and bears signs of the highest excitement and concentration of his powers.

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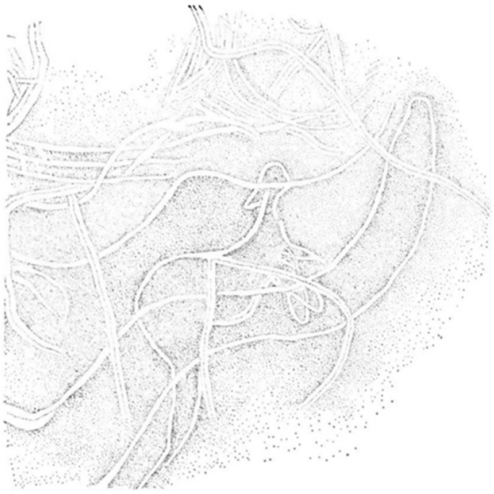
Our rationally trained eyes are at once arrested by his slanting stance. The methods of representation were quite other than "rational" in prehistory. As we have pointed out earlier, to depict an animal head upward does not mean that it is climbing, or head

down that it is falling into an abyss. The section following, on space conception in prehistory, will point out that prehistoric man did not feel obliged, as we do, to relate objects in space to the vertical and horizontal. His representations, as in this instance at Lascaux, were not meant to be static.

When I first visited the caverns in 1.949, I asked a local photographer to take a picture of the bird man from the ground of the "well," shooting on a plane without tilting the camera or using any artificial expedients. The bird man stood upright in all his strength. The scene is placed in a ritually important position close to the end of the cavern. It is difficult to reach, being below the normal level of the cavern and separated from it by a small rock wall. If one looks down into the "well" from this position, the figure again stands upright. In Windels' monograph on Lascaux, one of the photographs taken from above also shows the shaman in a vertical position, contrary to the author's expressed view (1948, p. 195).



343. PECH-MERLE (*Lot*): *Hall of the Hieroglyphs. Bird-headed female figure drawn in clay. With drawing*

ON THE SIGNIFICANCE OF MASKS AND HYBRID FIGURES

Masks and hybrid figures are inextricably interwoven. In them the real and the imaginary achieve the most immediate interpenetration. They throw more light upon paleolithic religious concepts than any other forms of representation.

Opinions about the meaning of composite figures have differed just as widely as those relating to masks. They range between two extremes: pure magic and pure materialism.

The naturalistic point of view holds that the animallike appearance of hybrid figures is due to the fact that paleolithic art was devoted almost wholly to animal representations (Luquet, 1910). In addition, the point has been made that there was an artistic incapability to shape the human figure as well as an interest in caricature and humor (Deonna, 1914).

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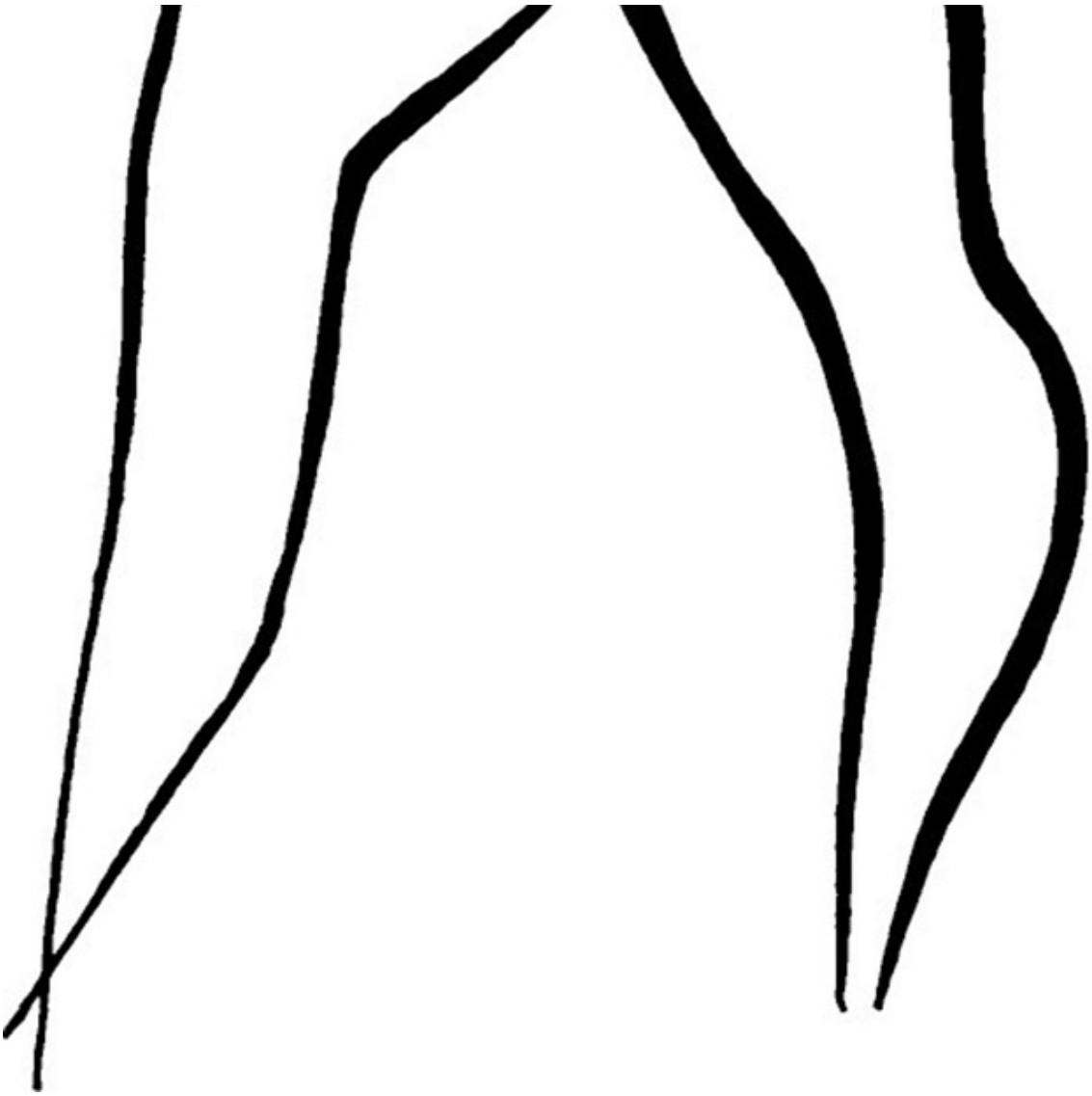
S. Reinach was the first to put forward an interpretation that stressed the magic aspect (1903, pp. 257–66). This was shortly after official recognition had been accorded to the cavern paintings. At the Congrès International d'Anthropologie et d'Archéologie in Geneva (1912), Reinach presented a hypothesis that was sensational for that time. On a *bâton de commandement* from the Abri Mège, Teyjat (Dordogne), there are, among other representations, three small hybrid figures which had been called *diablotins* or imps: human figures, all with chamois-like horns and human legs but with different heads and differently depicted pelts. All are leaping. Reinach suggested that these three figures were analogous to the *ratapas* believed by certain Australian clans to be fructifying germs which have assumed an animallike form (1912, pp. 363–68).

Today we would not venture to drive such an analogy so far. But the opinion that the *diablotins* did not represent simple masked dancers but a special kind of being opened the way to further studies.

In a monograph on a Spanish cavern, E. Pacheco-Hernandez expressed the opinion that prehistoric hybrid figures represented *genios fantasticos:* fantastic demons (1919, pp. 221–40). He saw the satyrs and fauns of the Dionysian cult as their survivors (p. 232) and endeavored to trace the type further on to the devils and imps (*demonios malignos*) of Christian art.



344. ADDAURA (*Sicily*): *Dancing figure with beaked head. Drawing by R. Laur*

345. LASCAUX (*Dordogne*): *The scene in the "well," with wounded bison, bird-headed shaman, and bird upon a pole. To left, some dots and tail of departing rhinoceros*

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As has been said, one needs to be cautious in introducing the concept of demons into primeval art. There are certain borderline cases which seem to fall between the hybrid figures and demons, like the creature with snarling mouth from La Pasiega, whose body is indeterminate. Hybrid figures, taken in general, are antennae reaching out from earthly matter: recipients of invisible forces. They partake of the nature of the shaman.

Masks and hybrid figures have this in common: it is impossible to determine them with any exactitude. It is impossible to come near to their meaning without bringing in the essential factor of indetermination. Indetermination between the real and the imaginary constitutes their rightful being, their rightful nature. It is related to the hovering indefinite forms which appear so often in primeval art and are a means of giving expression to relations with the supernatural.

With the symbols, multiplicity of meanings hindered an understanding of their significance. With the hybrid figures, on the contrary, it is the very factor of indetermination which gives the key to a comprehension of primeval religious concepts. The eternally changing shapes of the masks and hybrids expresses the never-ending search to give form to religious impulses without ever being able to crystallize them.

Primeval man remained enveloped in a marvelous unity of existence that embraced both the sacred and the profane. Matter was one with its spiritual content; there was no separation from the hereafter. All that was needed was human receptors — antennae — so formed, both outwardly and inwardly, that they could effect the most direct contact with the supernatural. This is the reason shamanism comes so close to the prehistoric hybrids, for it is not based upon theological dogma. It has often been said that the shamans were not priests, such as those who later formed the underpinning for the first high civilizations, with their new social hierarchy. The shaman had to make his own living through hunting, through working: he was not fed by the others. It is easy to presume that the "sorcerers" represented by the hybrid figures held a similar position.

Perhaps the eternal figure of the creative artist, with his ability to find an approach to spheres that are inaccessible to the average man, comes nearest to the meaning of the shaman, first projected in the form of the hybrid figure. This figure, expressing a relentless search to establish some connection with intangible forces, served as a pattern for later mythological beings. But at its first appearance in prehistory it was conceived in deadly earnest. One cannot overlook the fact that in Greece, even in the Dionysian tradition, the hybrid deities have been toppled from their original position to play secondary roles to the new anthropomorphic gods.

PART VI

THE SPACE CONCEPTION OF PREHISTORY

From the very beginning, man's artistic utterances have been affected — indeed, molded —by his attitude toward visual space. No art exists that does not express a definite relation toward visual space. Art transposes man's attitude towards space to the emotional sphere.

The intangibility of space

It is possible to set physical limits to space, but space itself is limitless and intangible. Space dissolves in darkness and in infinity.

It is necessary to take action before space can become visible: it must acquire form and boundary from the hand of nature or the hand of man. All else is relative to this. Space is intangible, yet space can be perceived.

What constitutes this perception of space?

A complex set of conditions is required to confine emptiness within such dimensions that a form is created which elicits an immediate emotional response. The elucidation of the process by which an impression of inarticulate voids becomes transformed into an emotional experience moves far away from logical reasoning.

What is it that happens?

Space is experienced in the realm of architecture by means of observation: the senses of sight and touch are interlocked. This is a simple statement of fact. By the interrelations of diverse elements and the degree of their emphasis — lines, planes, massiveness, proportion, form — a matter of simple physical observation can be transposed to another sphere. These diverse elements can suddenly be perceived as a single entity, a whole, imbued with spiritual qualities. This transformation of a simple physical fact into an emotional experience derives from a higher level of our faculty of abstraction. But before discussing this, we must briefly consider the beginnings of the perception of space and its early supremacy.

The priority of the sense of space

It is ever more evident that man developed a comprehension of space before he developed a sense of time. In the perceptions of prehistoric man, the sense of space

became supreme and acquired surprising power. Indeed, it was in prehistory, when man had no realization of time in its later meaning, that his space sense reached its highest level.

The Geneva psychologist Jean Piaget has established that the sense of time in children develops only indirectly (1946). To come to this conclusion he investigated the many stages of consciousness of the growing child. Like Lévy-Bruhl in his investigations of the mentality of primitive peoples, Piaget began by considering the child as an independently existing phenomenon rather than approaching him from the standpoint of the adult. The sense of time is brought home to the child through his comparison of the rate of speed at which different objects move through space. The unerring outlines of primeval engravings bear witness to the same thing: forms and movements of animals appear as though they had been burnt into man's consciousness.

From very early in life, the child has an appreciation of the bodily speed of movement through space, and this can be expressed in the psychological formula $c = s/t$: *velocity = space/time.* Piaget distinguishes two aspects of the sense of time: the sequence of events (before, after, at the same time) and the duration of events (longer or shorter duration). From a number of different expressions used by children aged 6 to 7, it appears that the sense of time develops only very gradually.

Similar observations were made by Lévy-Bruhl in studying the speech of primitive peoples. In his *La Mentalité primitive* he says: "The conception of time, particularly in a qualitative sense, remains vague. Almost all primitive speech is as poor in possibilities of expressing time relationships as it is rich in expressions of space relationships" (1922, p. 520). In explanation, he adds: "Frequently a future event, especially if it has something to do with the emotions, is described in the present tense." Beforehand, afterward, and at the same time are often difficult to distinguish from one another; today, tomorrow, and yesterday are similarly interwoven. All is an eternal present.

The nature of space conception

The first observable fact about visual space is its emptiness, an emptiness through which objects move or in which they stand. Man's demiurgic faculty — the almost godlike human compulsion to invent new things and to give spiritual quality to impressions of the senses —also operates in connection with space. Man takes cognizance of the emptiness which girds him round and gives it a psychic form and expression.

The effect of this transfiguration, which lifts space into the realm of the emotions, is space conception. It is the portrayal of man's inner relation to his environment: man's psychic record of the realities which confront him, which lie about him and become transformed. Man thus realizes, so to speak, his urge to come to terms with the world, to express his position graphically.

In their first Manifesto of 1924, the Surrealists speak of an "automatisme psychique pur par lequel on se propose d'exprimer, soit verbalement, soit par écrit, soit de toute autre manière, le fonctionnement réel de la pensée. Dictée de la pensée, en l'absence de tout contrôle exercé par la raison" (Breton, 1924, p. 42). A space conception is just such an automatic psychic recording in the realm of the visible world. It develops instinctively, usually remaining unknown to its authors. It is just because of its unconscious and, so to speak, compulsive manifestations, that the space conception of a period provides such an insight into its attitudes toward the cosmos, mankind, and eternal values.

Attitudes towards space change continually, sometimes in very small degree, sometimes basically. But there have been very few different space conceptions throughout the whole development of man. Each has covered long periods of time. Within each of these epochs, however, many variations and transitions have occurred; for man's attitude toward space, always in a state of suspension, can shift almost infinitely within the framework of the overriding concept.

A space conception is present throughout the whole existence of art. Prehistory is, in a sense, the prearchitectonic stage of human development. The space conception which encompassed the immensely long periods of primeval art underwent a change during the first high civilizations, with the appearance of architecture and its gradual predominance over painting and sculpture.

Was there a space conception in prehistory?

This controversial question is by no means as dissociated from the origins of art as might appear at first sight.

There are two opinions. One — admittedly dominant and held by generations of scholars — maintains that primeval art is without composition of any kind. It is uncontrolled, arbitrary, and chaotic.

The Viennese paleontologist Moritz Hoernes (1852–1917), who as early as 1898 made a survey of all the known examples of primeval art in Europe, stated that it "gives the impression of an orderless and directionless multiplicity, an undisciplined freedom which could not achieve results because it lacked the firm tradition and assuredness afforded by the strict observance of principles of style" (1925, p. 176).

Prehistoric artists do not appear "to see any necessity whatsoever of placing their otherwise correctly executed animals in the position that we consider alone admissible, namely with their legs extending downwards and their backs up. . . . In the great melee of animals at Altamira, the base line upon which each animal theoretically stands often deviates by 45° to 90° from the horizontal" (pp. 124–125).

Paleolithic art lacks "all order and control and is without any talent for combination and composition" (p. 194).

This attitude has been maintained, with some shades of difference, by most prehistorians up to now. It has also been adopted by archaeologists. "There is in fact no relation whatever between form and background; the single form is simply set off against chaos" (Groenewegen-Frankfort, 1951, p. 15). Herbert Read also finds that order and composition do not exist in Magdalenian art, and that they make their first appearance in the axial-geometric designs of the neolithic period (1955, pp. 36–37).

This attitude towards prehistoric art has recently been countered by the precise researches of Leroi-Gourhan and his circle on the spatial comparison, organization, and recurrent placement of animals and symbols found in some sixty caves and shelters. This work has been based on a statistical method, much in the way modern ethnologists use statistics in establishing the lineages of primitive societies (Leroi-Gourhan, 1958; Laming, 1959).

One of the first to speak out against the "chaos theory" was Max Raphael. In his book *Prehistoric Cave Paintings* he makes an analysis of the proportions of the various animals which occur in primeval art, particularly using the concave-convex outline of their backs. He finds that "these proportions — largely independently of the various animal species represented—can be reduced to a few recurrent types, such as 1 : 1, 1 : 2, 2 : 3, 2 : 5, 3 : 5, 3 : 4, 3 : 7, and 4 : 7" (1945, p. 28). The first two of these do not require any explanation, as they can easily occur anywhere. The following three form that homogeneous group (2 : 3 , 2 : 5, 3 : 5) which is known as the "golden section." This second astonishing statement will of course be met with general skepticism. In both our aesthetic and our historic thinking, cave dwellers and the golden section appear utterly incompatible. There is no need to detail here how Raphael explains this by connecting the proportions of the human hand with the golden section and then with the magical implications attributed to it (1945, pp. 28–29).

Raphael is able to reveal such relationships because he knows well that in prehistory "an axis to balance the left and right was not introduced" (p. 45). Perhaps it is the absence of such an axis which has led many others to believe that primeval paintings have no composition: for, under the pressure of both Classical and Renaissance art, we tend, in our approach to every composition, to "set it right" in accordance with the rules of balance around an axis within a world which itself is "out of joint."

Leroi-Gourhan approached the laws of primeval composition by posing the question whether "despite the ever-changing disposition of the cavities in them, the decorated caverns were not, in fact, organized sanctuaries" (1958, p. 307). This was said without ignoring the *destruction chronologique* resulting from the use of the caverns at different epochs and bound up with the fundamental "continuity principle" of prehistory. By his statistical comparisons of animals, animal groupings, and signs, Leroi-Gourhan has been able to establish a disconcerting degree of concurrence (1958, pp. 515–28). He goes so far as to predict the placement of these elements in newly studied sites. This statistical method is accompanied by cautious yet acute research into the significance of the different figurations.

These evidences go to show that primeval art was by no means created chaotically. Signs that abide for thousands of years are renewed and repeated again and again. As we have said earlier, certain animals are found to stand in a constant symbolic relation to one another — thus, as Laming reports in her unpublished dissertation, the association of bison and horse: bison symbolizing the female, horse the male character. These appear to occupy certain definitely established positions within the caverns.

Thus an all-inclusive framework seems to emerge: the space conception of primeval art, a conception far removed from chaos.

The space conception of primeval art

The space conception of a period is the graphic projection of its attitude towards the world. This holds true if we consider the Renaissance, when everything was dominated by the eye of the beholder and was graphically depicted by perspective projection. By this technique the momentary retinal image was transfixed upon a plane surface: things were shown not as they are but as they appear at a single moment. The space conception of the Egyptians led to quite another method of representation, in which several different aspects of the same object were depicted upon a vertical plane, undistorted and in their actual size.

For eyes trained to look at things in perspective projection, the Egyptian procedure of assemblying all the most characteristic aspects of every part of the human body upon a vertical plane may seem highly artificial. To the Egyptian eye it was not, for it seemed most logical to depict the accurate relationships of all parts of the human body, fixed for all eternity.

This kind of representation was the result of a tremendous revolution in the manner of human perception which occurred before the dawn of the historical period. Paleolithic man's indifferent relationship to an unlimited number of directions became replaced by one overriding relationship: to the *vertical.* For the moment it is enough to say that the Egyptian method of representation is based on a sense of order that has been deep-rooted in human nature for over five thousand years. This sense of order involves relating everything that one sees either to the vertical or the horizontal. Each of us carries in his brain a kind of secret balance which impels us unconsciously to weigh everything we see in relation to horizontal or vertical —to the rectangular. This ranges from the composition of a painting to our everyday habits. We feel slightly uneasy when our knife and fork are not laid straight beside our plate at table or when the writing paper on our desk is not parallel to the blotter. But this is not the only possible conception of order. A conception not dependent upon the vertical, occurs in primeval art.

Primeval pictorial composition was not rational, to our way of thinking. Primeval man was nevertheless able to master the syntax of pictorial art (Hoernes and Menghin, 1925, p. 127). He simply had a different approach to art from the one we have become

accustomed to, ever since we accepted the dominance of the vertical and the horizontal, which, with their natural corollary the right angle, have now become so embedded in our consciousness that they seem to be an absolute condition of order.

Our rectangular way of looking at things was unknown to prehistoric man, as indeed it still is to many contemporary primitive peoples. Ambiguity, apparent contradictions, the interweaving of events without regard to our sense of time (before and after) — these are the essence of primeval art.

What is it that differentiates the space conception of prehistory from that of later periods? Do any criteria persist throughout the whole period of prehistoric art itself?

It was almost by chance that I discovered how the prehistoric artist organized not only his composition but also his attitude towards space.

Not far from Les Eyzies lies the little museum at Laugerie Basse, situated directly under an overhanging curtain of rock. Laugerie Basse was one of the earliest sites to be excavated. The first discoverers of primeval art — a Frenchman and an Englishman, Edouard Lartet and Henry Christy — conducted excavations here in 1863, reporting their findings in *Reliquiae Aquitanicae* (1865-75).

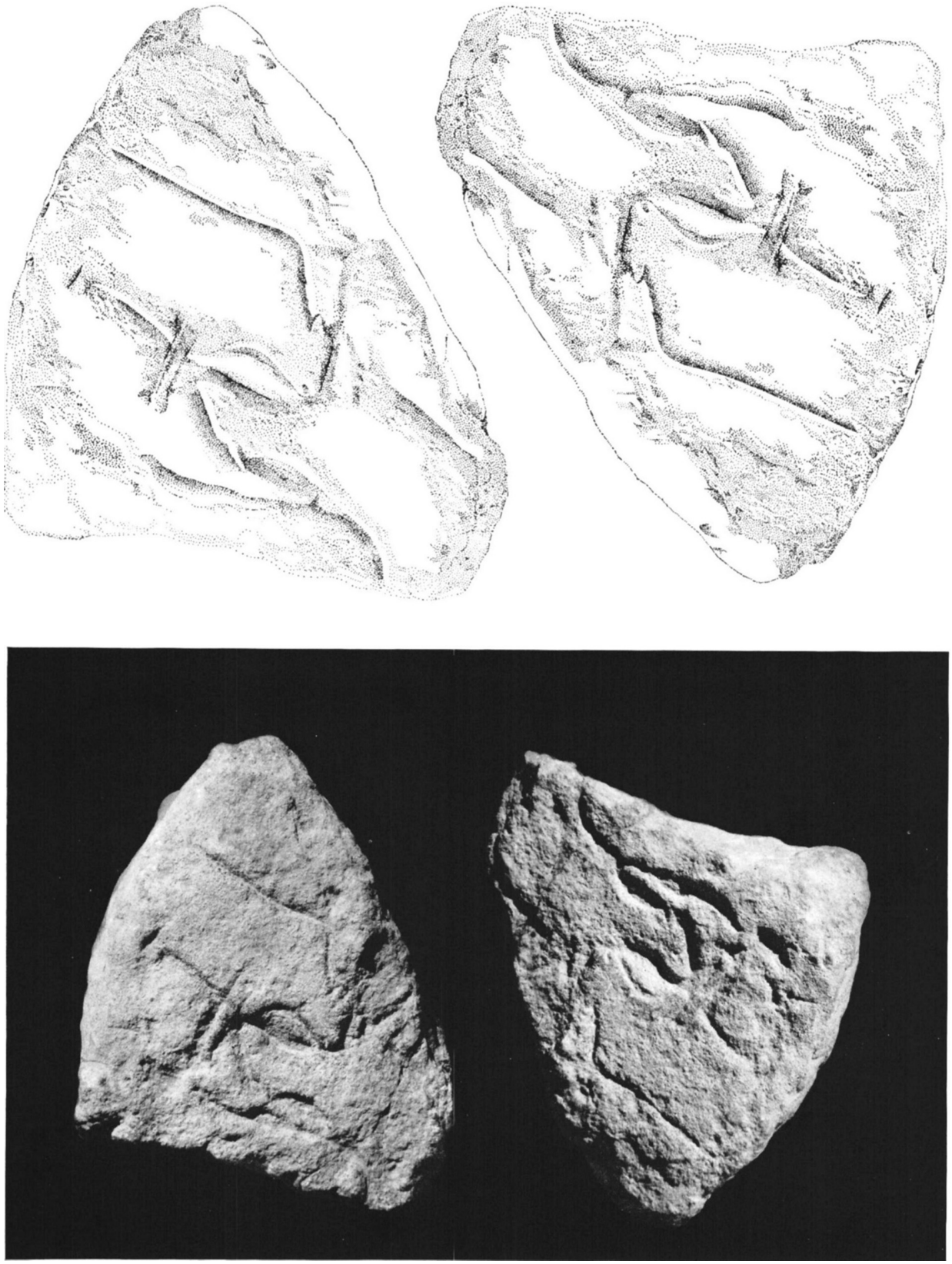
right

In the museum of Laugerie Basse a triangular block of stone with incurving sides caught my eye because of its shape. I took it out into the sunshine to photograph it. It then became apparent that sloping downward on the upper part of the left face was the engraved outline of a bovide. Its hindquarters disappeared into the stone, together with the extremities of its hind legs. But the line of its back was deeply and firmly engraved, with a sharp nick at the position of the shoulder blades. As so often in prehistoric art, the head was strongly molded. At first glance it appeared as though the animal were grazing on a slightly convex ledge, with his strongly emphasized forelegs resting on a lower level.

When I lifted up the stone to take it back, I turned it by chance through an angle of 180 degrees. This enabled me to see that the curve of this ledge formed the neck and chest of another animal which, in our way of looking at pictures, would be described as standing on its head. The outstretched neck and head of this gazellelike creature were clearly evident in the altered angle of light. The rest of its body was only roughly indicated. Apparently the animal was depicted in flight. An outstretched foreleg lay alongside the head of the bull, which, again owing to the change of light, had now disappeared —at least from our eyes. But the eyes of prehistoric man were free. He did not find it necessary to translate every composition into vertical parallels.

This carved block of the middle Magdalenian period is certainly not an important work; but, twisting it by chance, I could see how the light made animals appear and disappear, as in the caverns the flickering torch makes the different shapes come and go. This made me aware, suddenly, of the intentions of primeval art —of its principle of

composition. It became clear to me that paleolithic man looked at objects and at space in a way very different from ours.



346. LAUGERIE BASSE (*Dordogne*): *Triangular stone, with engraving of a bull apparently grazing. When the block is turned around, a gazelle-like creature appears*

Eskimo perception and primeval art

Some years later I received confirmation of this method of perception from E. S. Carpenter, an anthropologist who had studied the art of the Eskimos of northern Canada. The same principles that underlie the space conception of primeval art existed in that culture — its roots extending back into prehistory — until it was undermined and ruined by the pernicious influence of Western naturalism. These principles are not true only of the Eskimos; they hold for the entire so-called circumpolar culture, which comprises most of the peoples living in the arctic regions between the sixtieth and sixty-fifth parallels. These peoples have common crafts, common implements, and common rites, expressed typically by slate weapons, crescent-shaped implements, comb pottery, skin boats, and shaman drums.

As early as the 1860's, the hypothesis arose that the Eskimos might be descendants of the Magdalenian people who had followed the reindeer herds northward in the wake of the retreating glaciers. Lartet was not only the first to excavate *art mobilier* but also the first to mention certain similarities between the prehistoric needles he was finding in the south of France and an Eskimo bone needle: "It differs but little from those used by the Aborigines of Périgord, except that it is not straight or so delicate as most of those" (Lartet and Christy, 1865–75, p. 130).

The hypothesis that the Magdalenian people had gone north with the reindeer was clearly enunciated in a long unsigned review of Lartet's and Christy's then startling publication *Cavernes du Périgord: Objets gravés et sculptés des temps Préhistoriques dans l'Europe occidentale* (1864). The reviewer wrote: "May not the race that lived on these two animals [reindeer and "musk-sheep"] in Southern Gaul have shared also in their northern retreat, and may it not be living there in company with them still? The truth of such an hypothesis as this is formed by an appeal to the weapons, implements, and habits of the Esquimaux. The fowling-spear, the harpoon, the scrapers, the marrow-spoons are the same in the ice-huts of Melville Sound as in the ancient dwellings of Southern Gaul" (*Saturday Review*, Dec. 8, 1866, p. 713).

This theory of following the reindeer northward was adhered to for over half a century. The facts that were accumulated with increasing archaeological knowledge obliged it to be set aside, but the basic affinities between Eskimo art and paleolithic art remain relevant.

In a masterly study, G. Gjessing brings together a precise and far-reaching approach to the question of the unity of the complex of arctic cultures. He does not ridicule the theory of following the reindeer herds: he comprehends its inner significance and substantiates the fact that the western European and circumpolar cultures stem from common roots. (Cf. the use of the "life line.") Both received implantations from an undetermined central Asian source: "From this Central Asiatic (?) source monumental hunter's art must have spread partly westwards in two new waves, one through central

Europe to southern France and northern Spain, and one farther north via Kola into northern Norway, and partly across the Bering Strait to North America" (1944, p. 70).

The elements common to primeval art and the art of the circumpolar peoples cannot be explained simply by reference to their similar ways of life or their use of similar implements. They are rooted in the long continuance of a retarded Aurignacian culture in Asia. The sources of Eskimo culture have been traced to the Siberian plains. Their innermost relations are revealed in their art, such as the representations of animals with a life line running from mouth to heart; but it is even more astonishing to find the space conception that was so strongly developed in the Magdalenian era appearing again among the Eskimos. This can be seen most positively in their engravings on bones and reindeer antlers.

There is one main difference between Eskimo art and that of the American Indians. The sand paintings of the Navahos stem from a later period of development, a period when the supremacy of the vertical had become dominant: in other words, when all representations were organized in relation to the right angle. In contrast, the apperception of the Eskimos remained based upon the apperceptive principles of primeval art. Vertical and horizontal had not yet become the dominant organizing principle. All directions were of equal importance. Carpenter is perhaps the first scholar to have brought a post-nineteenth-century approach to the study of Eskimo art. He is thus able to penetrate beyond the outward appearances of a representation and to recognize its space conception. The statements of Eskimos still living and the manner in which they look at drawings and make them can in retrospect throw light upon the space conception of primeval art.

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With total unconcern they depict figures adjacent to one another but apparently standing on their heads. They find it quite unnecessary to twist the picture around, through ninety or 180 degrees, in order to grasp it as a whole. E. S. Carpenter kindly sent me the photograph of a reindeer-horn knife handle from the Canadian Eskimos which depicts a caribou in two characteristic positions: one on guard, the other grazing. If the handle is turned ninety degrees, the grazing animal becomes upright and watchful.

Carpenter lived for some years with the Aivilik Eskimos, north of Hudson Bay. In a recent essay (1955), he examines their space concepts in relation to their sense of direction, their views of the universe, and, above all, their art. When an Eskimo child cannot complete a drawing upon a sheet of paper, he draws the rest of it upon the other side. This is similar to the way the Eskimos compose their engravings on bone or walrus teeth and their carved cribbage boards. They have a "habit of scratching until a figure reaches the limits of the ivory, then turning the tusk over and completing the figure on the reverse side" (1958, p. 141).

"In handling these cribbage boards," says Carpenter, "I found myself turning them first this way, then that, orienting each figure in relation to myself. The Aivilik do not do

this. Carvers draw a number of figures each oriented —by our standards —in a different direction" (1955, p. 142).

It is this manner of seeing things without "relation to myself" which distinguishes primeval art from all later art. It is not disorder but a different form of order that is being followed —an order to which we, in our sophistication, have lost the key.

In publications on the Eskimos by excellent ethnologists we often read that the explorers gave one of them a pencil and the flat smooth surface of a sheet of paper, asking him to reproduce their animals and their demons. The result of these experiments is highly unsatisfactory, lacking all emotional impact. The two-dimensional material did not give them an adequate medium for expressing their intention. To stimulate his imagination, the Eskimo needed the roundness of the walrus tusk and all the freedom of artistic expression it offers. Since the time of their crossing the Bering Strait from Asia, at about 1500 B.C. , the Eskimos have clung to a prehistoric concept of space as their heritage, until recently, when the infiltration of "civilized" influences began to weaken their culture.

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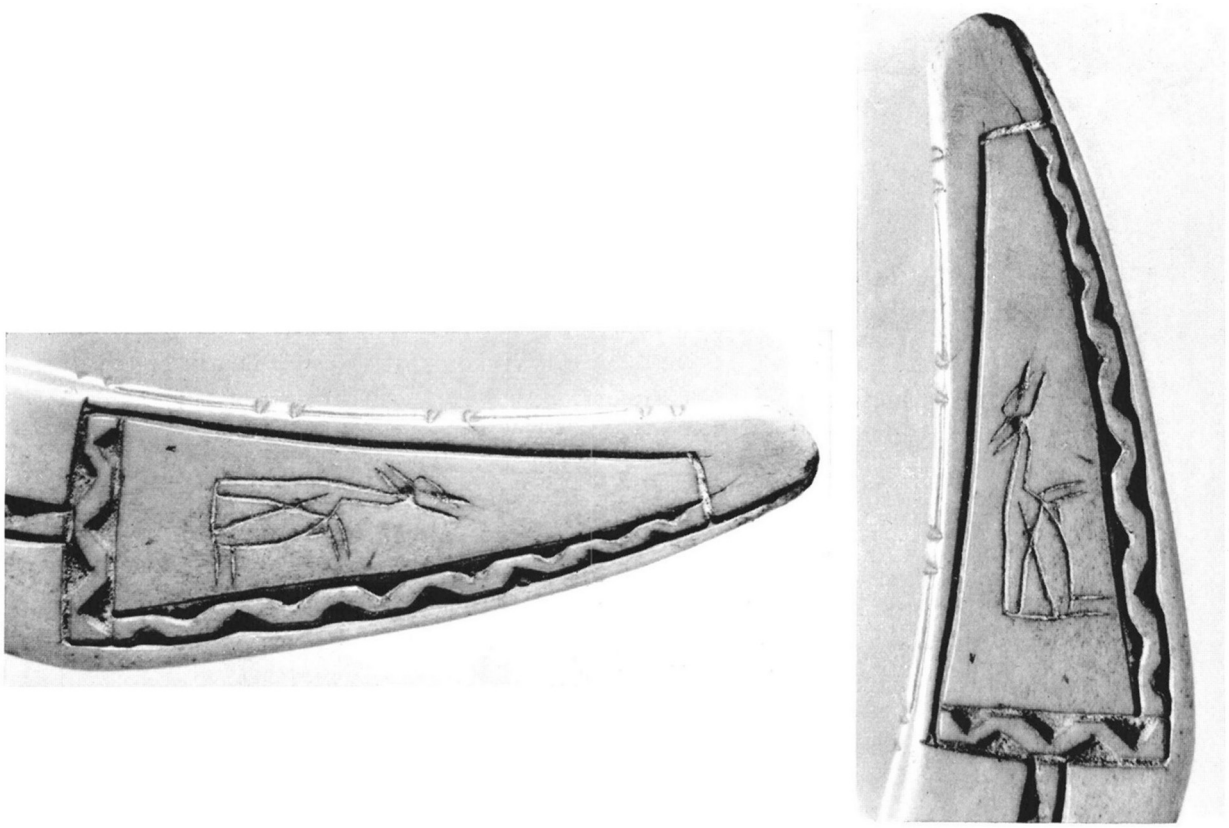
A small object of *art mobilier* may remind us of the freedom with which planes and directions were used in prehistory. On a *propulseur* — a "spear-thrower" — from Le Mas d'Azil, two protruding tines of a reindeer antler are carved as horses' heads, facing different directions. A third head, skinless, is — quite unexpectedly for us — turned upside down.



347. ESKIMO (*Northeastern Canada*): *Handle of a "crooked knife" made from reindeer horn, engraved with a grazing caribou (7.3 in.). When the handle is turned upright, the reindeer appears to be standing up on guard*

On the structure of caverns and architecture

The dwellings of prehistoric man were not in the interiors of caves. They sheltered under overhanging rocks, as in La Ferrassie, Laussel, Laugerie Haute, and Laugerie Basse; at the mouth of caves as in Altamira, El Castillo, La Mouthe, Font-de-Gaume, and Les Combarelles, where along a low corridor dark stains have been found around fissures in the rock through which smoke could have escaped.

No traces of human habitation have been found in the depths of the caverns. These were holy places where, with the aid of magically potent symbolic pictures, sacred rituals could be performed.

These caverns owed their existence to the forces of erosion, which often endowed them with fantastic formations. Sometimes surfaces were polished smooth by sand and water. The heavy clay sank to the ground, though in many cases it adhered to walls and ceilings. After periods of upheaval, drops of hard calcareous water from mountain streams filtered through the rocks and gradually deposited translucent films over the walls or formed columns — stalactites and stalagmites — which grew slowly from the ceiling down and from the floor up until the two met.

In some of the caverns, which are closed to tourists and which have remained undisturbed throughout tens of thousands of years, e.g., Le Tuc d'Audoubert, dreamlike crystal growths arise from the ground: thickly clustered, white as snow and fine as needles, which shatter at the exhalation of a human breath. These fantastic subterranean caverns undoubtedly possess an air of marvel and mystery. But one must beware. Though the site of the marvels of primeval art, these caverns have little in common with man-made architecture.

Everybody is free to interpret the fantastic forms occurring in these caverns as cathedrals, galleries, chapels, or what you will, but, whatever they may seem to be, these sequences of forms, sometimes sharply defined, sometimes utterly amorphous, are not architecture.

right

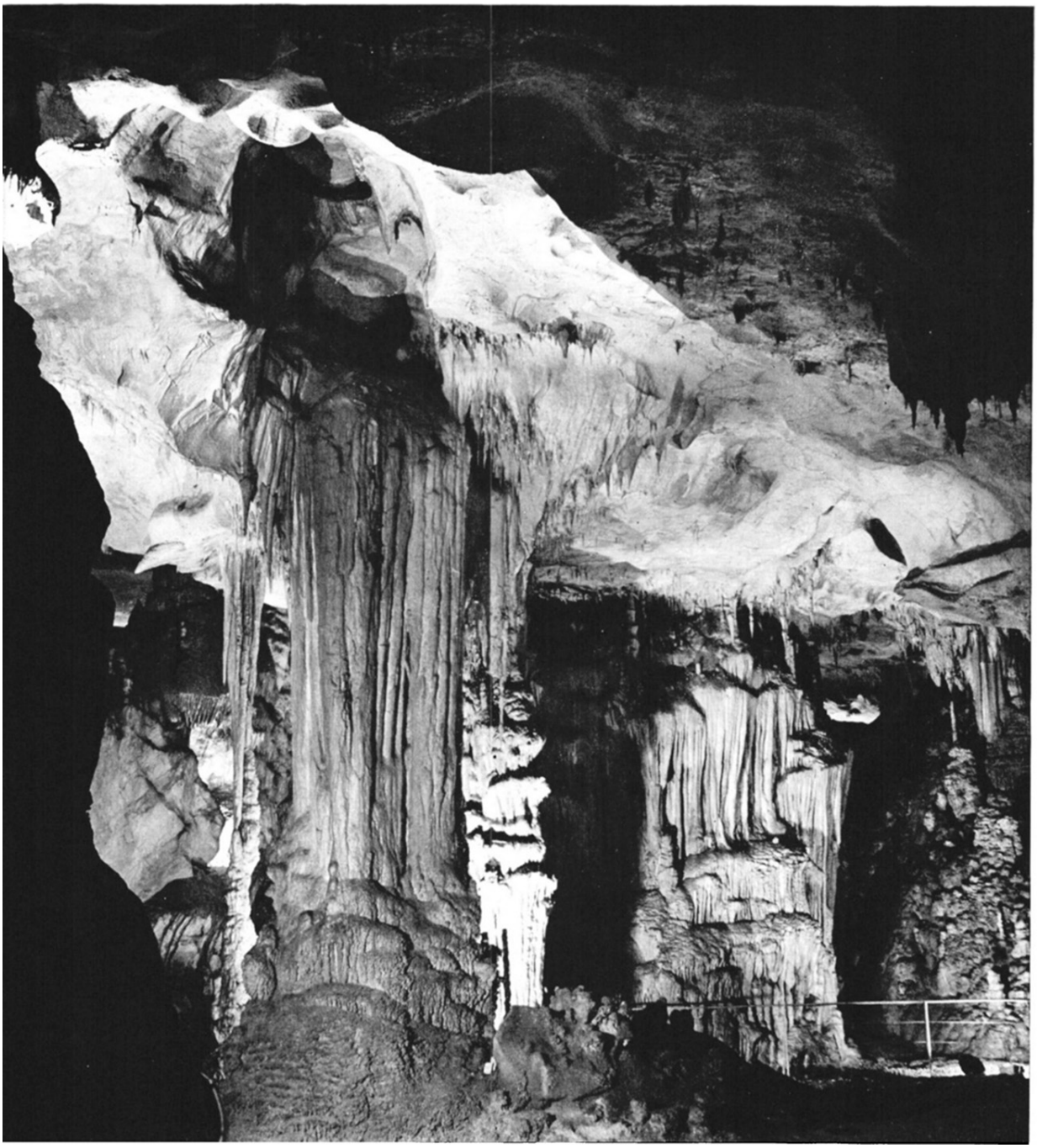
Vaults, so high that they are beyond the reach of the beam of light from one's electric torch (e.g., the Salon Noir at Niaux) alternate with tubelike passages, so low that one can only edge one's way along them in a prone position (e.g., Le Combel at Pech-Merle): suddenly there are abrupt abysses, huge boulders, or vast falls of debris. The caverns possess an interior — sometimes an impressive interior — but they have no exterior. In every way they are quite different from the architecture invented by man many ages later.

The caverns possess no visual space. In them perpetual darkness reigns. Spatially speaking, the caverns are empty. This can be well appreciated by anyone who has tried to find his way out of one alone. The light from his torch is swallowed up by the absolute darkness around him, while rocky tunnels and crumbling slopes repeat themselves in every direction and re-echo his question: where is the outlet from this labyrinth?

Acoustic space

It has been accurately observed that apart from optical space — space visible to the eyes — there is also acoustic space, which knows no emptiness and which can be filled with sound. This is a realm in which no importance is laid upon tangibility or visibility.

As far as we know, Le Corbusier was the first to speak of an acoustic architecture. His studies led him, as he says, to the perception of "an acoustic intervention in the domain of forms. . . . One starts with the acoustics of the landscape, taking into account the four horizons. . . . One then creates forms to respond to these horizons, to greet them" (1953, p. 88).



348. PECH-MERLE (*Lot*): *Interior of the cavern*

This acoustic space, which does not concentrate upon the single form in isolation, has its counterpart in primeval apperception. The caverns are dark —without architectonic, tangible space. Yet they have audible space.

Once more the contemporary artist unconsciously comes near to the perception of primeval man. Carpenter insists that the Aivilik Eskimos do not describe space "primarily in visual terms. They don't regard space as static, and therefore measurable; hence they have no formal units of spatial measurement, just as they have no uniform divisions of time. In our society to be real a thing must be visible and preferably constant. We trust the eye not the ear. They define space more by sound than sight. . . .

The essential feature of sound is not its location but that it be, that it fill space. . . . Auditory space has no favored focus. It's a sphere without fixed boundaries" (1955).

It may be that the intangibility so prevalent in paleolithic art is a product of its relation to audible space. The figurations in the caverns appear and disappear from one moment to the next. Their aspect is dynamic, not static. Like sounds, they come and go.

Light and the art of the caverns

Nothing is more destructive of the true values of primeval art than the glare of electric light in this realm of eternal darkness. Flaming torches or the light from small stone lamps burning animal fat, of which examples have been found, permit one to obtain only fragmentary glimpses of the colors and lines of the objects depicted. In such soft, flickering light the animals take on an almost magical movement. But the engraved lines, even the colored surfaces, lose their intensity under a strong direct light, and sometimes disappear altogether. Only soft sidelighting — *lumière frisée* — can reawaken some of the original strength. Only by this means can the fine veining of the drawings emerge unsmothered by their rough background.

Primeval man saw the caverns as sites which seemed to him predestined for his magic symbols. These sacred areas were sought for and selected with the utmost care. Some were perhaps chosen because the rock formation seemed particularly suitable. But most were chosen because he believed them to possess special powers.

501

One predisposition can be detected, however, which recurs repeatedly. Prehistoric man certainly did not consider the cavern as an edifice to be decorated: secret signs and figurations are placed in positions extremely difficult of access, and at the uttermost ends of the caves, where the walls narrow to a mere crack (e.g., La Pasiega). In such cases it is clear that paleolithic man was anxious to conceal his symbolic creations from the eyes of the uninitiated. Even when placed in a more exposed position, the figurations emerged only momentarily in the dim light of his flickering lamps.

This tradition of secreting sacred manifestations in places accessible only to the initiated persisted also in the Egyptian temples. In the New Kingdom temple of Karnak, the most sacred figure of the god, though small and wooden, was concealed in a dark cell at the farthest extremity of the temple. No one but the king and the high priest had access to this place. What in prehistory was provided by nature here became translated into architecture.

Prehistoric man did not regard the caverns in any way as architectural space. For him the selected rock walls were sacred surfaces upon which he worked with the utmost freedom. From this, a new approach to the space conception of prehistoric man begins to emerge: the unfettered manner in which he handled all surfaces and his attitude toward them.

Freedom of approach to all surfaces

The surfaces of the caverns and overhanging cliffs are sometimes flat and sometimes curved. They change continually in their form and in their direction, sometimes also in their color. This is particularly true of the limestone rocks and caverns of the Dordogne — one of the great centers of primeval art. Here the rock walls are as smoothly polished as though a glacier had passed over them. The surfaces are, however, never regular. Walls and ceilings curve gently in every possible direction.

This multiformity of surfaces, with an infinite freedom of direction and perpetual change, is at the root of all primeval art. Primeval art is embedded in nature itself, though it knew how to preserve the essential individuality of man.

Despite all that has been said, it would have been possible for paleolithic man to give preference to horizontal and vertical planes in selecting the surface for a work of art. But this was never done. No slope or angle of the smooth rock surfaces received preference. The first criterion for selection seemed simply that a surface must possess some magical properties. In no case was primeval art employed to "decorate" a surface.

To recapitulate, primeval man had a complete freedom of approach to all directional surfaces. This is why, if we wish to come near to an understanding of primeval art, we must strive to free ourselves from the way of looking at things that has been part of our inheritance for thousands of years. The lines and orientation of a prehistoric picture have no relation to the horizontal or vertical; nor is the selection of the surface dependent upon its angle of inclination. Whether the structure and shape of the surface be smooth, curved, or puckered, one can always recognize paleolithic man's ability to use it to the full. A few instances follow.

Vaulted surfaces

51

The Hall of the Hieroglyphs, *Pech-Merle:* On the damp clay ceiling of the Hall of the Hieroglyphs in the cavern of Pech-Merle, which measures about ten by four meters, generation after generation of Aurignacian men drew with their fingers the outlines of supplicatory figures, superimposing them one upon the other: mammoths, bird-headed goddesses, and fragments of other beings. These clay tracings, dating from the beginnings of art, are suspended above the void. Here there can have been no question of decorating a space.

424, 267 col

Altamira: Many millenniums later, the same phenomenon appears upon the ceiling of the cavern of Altamira, which represents the apex of Magdalenian art. This rock vault is only about two meters from the ground, so it is impossible to stand upright beneath it. A

pathway has therefore been dug out for visitors to walk along. Over this low vault are spread the famous frescos, with their animals and gigantic symbols, which on one side merge into the earth. To get a good view of this ceiling one must lie stretched out upon the original level of the floor. Even then the eye cannot take in the structure of the entire composition at one glance. It was not created for the "public," nor to decorate a space: it is magic which exists for itself.

Neither the slightly curved Pech-Merle ceiling, from the earliest period, nor the Altamira ceiling, from the period of the highest artistic knowledge in prehistory, spans an architectural space. Each exists for itself alone, hovering independently over the hollow area below.

264 col

The axial gallery, *Lascaux:* Sometimes naturally formed arches and passages take on such regular shapes that they appear to be almost the work of human hands. The domelike vault and branching passages of Lascaux fall into this category. Here the ceilings were composed of very thick, nonporous limestone which, through condensation, became entirely covered with tiny lime crystals. This provided a magnificently solid painting surface. The walls, on the other hand, were impossible to paint on, being made of a brittle rock with many horizontal cracks.

409, 413, 399, 521

Both the dome, with its frieze of gigantic animals, and the passage that leads almost axially from it (called, from its position, the axial gallery) show paleolithic man's manner of handling curved surfaces. The tunnellike passage is particularly instructive. At first sight the semicircular vault of the near part of its roof, with its luminous colors and crystalline background, has almost the appearance of a gallery in a baroque Italian castle. Closer observation shows, however, that in painting this curving, concave surface, which stretches away into the distance, the same attitude was adopted as was used in making minute Magdalenian engravings upon rounded pieces of bone. Red-brown primeval cattle, yellow and black horses, and red dots and other magical signs are all freely disposed at varying angles, and yet one cannot help realizing that there is a general sense of composition. It is this different way of looking at things that is so interesting to us today: the way in which prehistoric man could grasp things in their entirety without needing to organize them according to a static point of view to adjust them to the vertical. Two instances are the red cow in this sloping passage, which, to our eyes, appears to be leaping over a chasm, and the horse at the end of the passage which is said to have "tumbled over a precipice." The treatment of this horse has been compared to a similar method of representing a whole group of animals in the Chapel of the Mammoths at Pech- Merle which also appear to us to be falling into an abyss. Their prehistoric designer did not see them in this way at all. For him their representation

followed the same principle of vision that was shown on the carved triangular block from Laugerie Basse.

Irregular surfaces

263 col, 370

El Castillo: This same principle of vision is instanced in the bison of El Castillo, which, at first glance, appears to be climbing vertically up a stalagmite. This bison is in the second chamber of the cavern El Castillo. The bold carving of his powerful loins strikes one immediately on entering the hall because of the deep dent thus made which distinguishes this stalagmite column from all the others that surround it. A nearer view shows that some parts of the animal — tail, flanks, the outline of the back and belly — "sont formes par un accident rocheaux" (Alcalde del Rio, Breuil, Sierra, 1912, p. 75). This was noted both by Alcalde del Rio, who discovered this cavern in 1903, and by Breuil, who first described and illustrated it.

In forming this bison, the artist proceeded from the natural shapes before him. He carved in the hind hoofs very precisely, just beneath the swelling flanks; he strengthened the natural outline of the hindquarters and the belly; he added a bit of black color to define the mane and the lower parts. The animal's small head, lightly sketched-in horns, and painted nose almost disappear into the rock. All emphasis was concentrated upon the tension of his sinewy body. The same kind of representation had already come into use in the Solutrean age.

Altamira: As is universally the case in primeval art, the eye of the ice-age hunter discovered images of the animals he sought in the structure of the rocks. A few lines, a little carving, or some color were enough to bring the animal into view.

427

In Altamira a Magdalenian artist was able to transform a number of ceiling protuberances into bison — lying, falling, and standing — with a mastery of line and color hitherto unknown.

Sloping surfaces

right

Le Tuc d'Audoubert: Freedom of approach to all surfaces, regardless of horizontal or vertical direction, is a basic principle of primeval art. This is again demonstrated in an unusual situation, when the background for a work of art had first itself to be prepared. This was the case for the two bison modeled in high relief in the *sanctum sanctorum* of the cavern of Le Tuc d'Audoubert. These bison were modeled upon an inclined surface. They could just as easily have been modeled in a vertical position, but they were not. The inclined surface not only demonstrated primeval man's freedom of approach to his

subject; it also heightens the impressiveness of the fertility rite and makes the mounting position of the male animal terrifyingly vivid.

The coming change

Primeval art never places objects in an immediate surrounding. Primeval art has no background. This is apparent in such large murals as the ceiling of Altamira as well as in the small ritual objects of *art mobilier*. It is inherent in the prehistoric conception of space: all linear directions have equal right, and likewise all surfaces, whether they be regular or irregular. They can be tilted at any angle to the horizontal throughout the entire 360-degree range. Animals that to us appear to be standing on their heads do not appear inverted to the eye of primeval man, because they exist, as it were, in space free from the forces of gravity.

349. LE TUC D'AUDOUBERT (*Ariège*): *The two bison modeled in clay on a rock fallen from the ceiling*

Primeval art has no background.

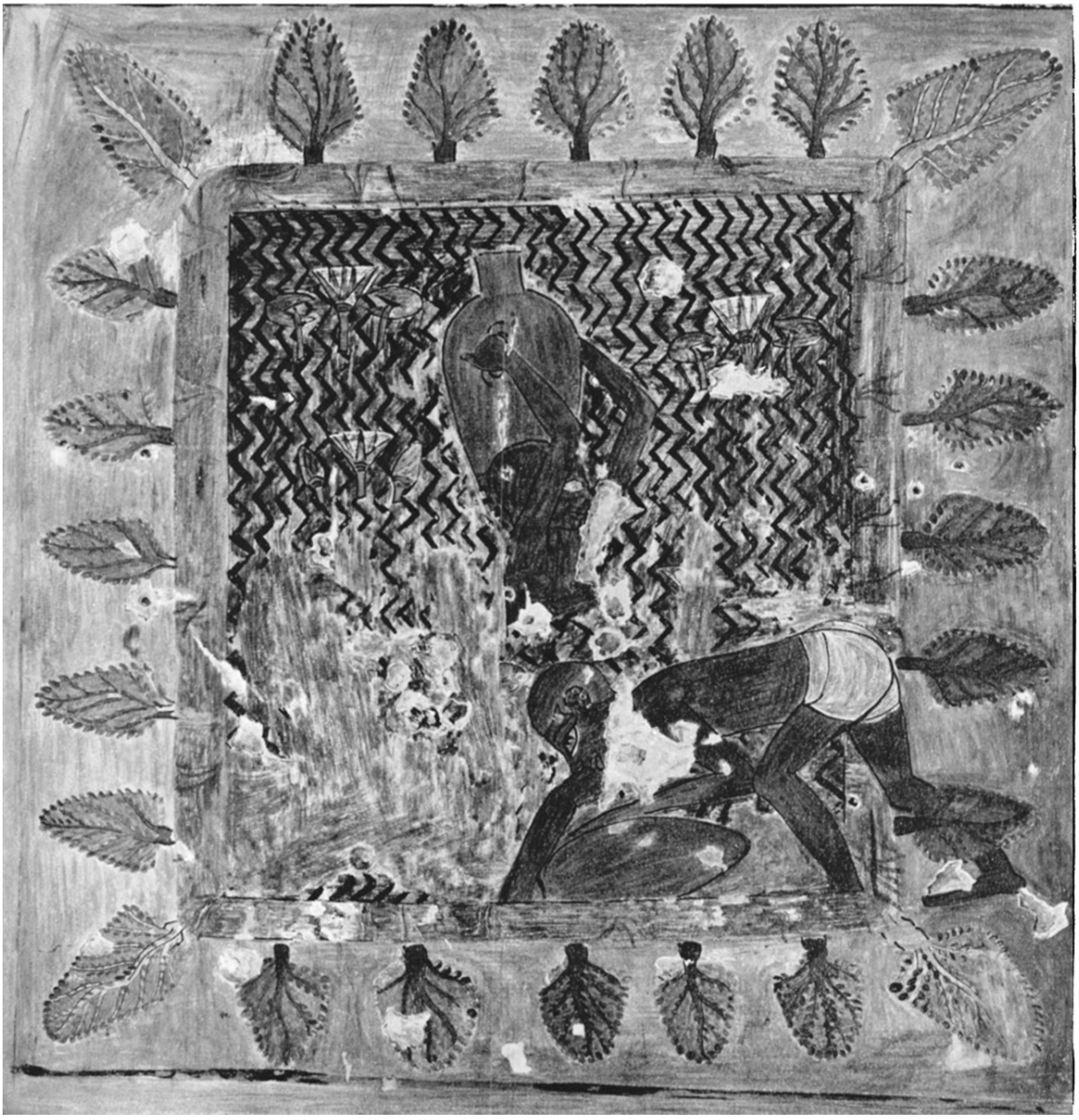
The rise of the high civilizations of Sumer and Egypt changed all this. The relation to an unlimited number of directions was replaced by the relation to a single direction: the vertical. The horizontal is only its natural by-product, as is the ninety-degree angle they define. With the increasing dominance of the vertical as the ruling principle, the axis and bilateral symmetry appear throughout the composition of the reliefs, the sculpture, and the emerging architecture.

In the second volume we will trace this development throughout the formative period of Egyptian art, when all directions became related to the vertical line and all surfaces became subordinated to the vertical plane, including all parts of the human body. Although these changes are mentioned here only in order to contrast them with prehistoric freedom, there is in one respect a certain link to prehistoric representation: all objects are projected upon a flat plane, which does not permit the actual distortions of perspective as they appear to the natural eye. The Egyptian eye immediately translated these flattened figures into three dimensions with the same ease with which the primeval eye accepted animals in any conceivable position.

right

Representations of this kind go through the whole course of Egyptian art. A single example from the New Kingdom may at the moment suffice to indicate this: a wall painting from the tomb (Thebes) of Rekh-mi-Ra, a high official of Upper Egypt around 1450 B.C. It represents a pool from which two servants are drawing water. The prehistoric multidirectional liberty has vanished. It is replaced by the organizing principle of the vertical and horizontal, with their angle of ninety degrees. The water in the pool is represented vertically by zigzag lines, an iconographic convention since the early Dynasties. Indeed in many Fifth Dynasty tomb reliefs, these zigzag lines indicate the depth of the water.

In the Thebes painting, the rectangular pool is surrounded by trees, which on all four sides are projected onto a horizontal plane. The two servants drawing water are free and elegant in their movements. They are depicted in a — for us — normal position, and yet their bodies are arranged to meet at an angle of ninety degrees.



350. EGYPT, *Eighteenth Dynasty: Wall painting*, *Tomb of Rekh-mi-Ra*, *Thebes*, *1450* B.C.

Prehistoric space conception and contemporary art

Abstraction, transparency, and symbolization are constituent elements of prehistoric as well as of contemporary art. The space in which they evolve has many things in common although differences do exist, but this is not the moment to deal with them. For the time being it is only their inner relationship that is of interest to us. Theirs is a space without definite background: universal space, so to speak.

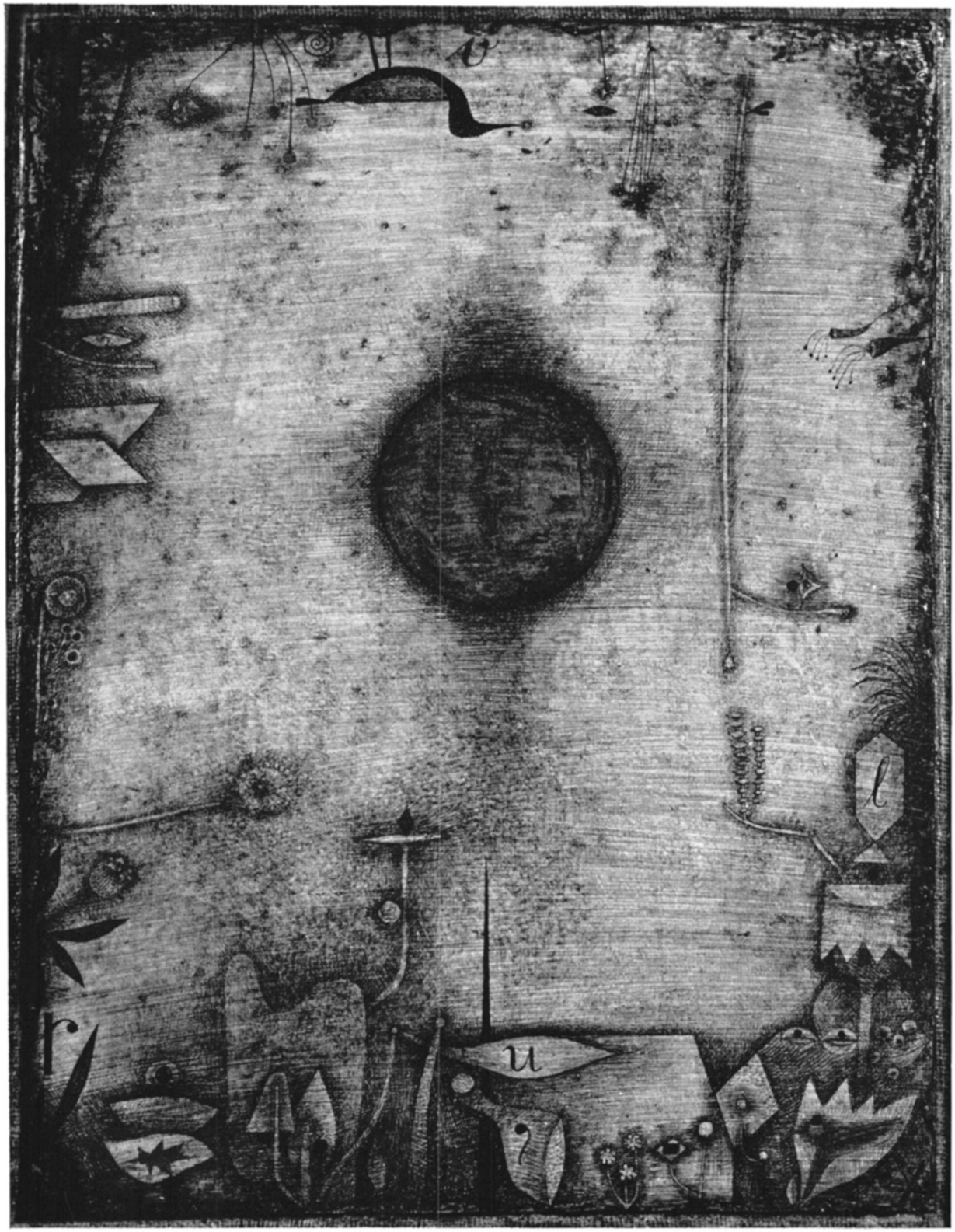
We are indebted to artists like Kandinsky and Klee who by their work have opened up new vistas for us so that we are slowly able to understand the space conception of primeval art. They have opened our eyes to the artistic organization of the picture which

is not exclusively dependent on vertical lines. In Kandinsky's early work — e.g., *The White Edge* (1913, Guggenheim Museum, New York) — we encounter a strong desire to explore the newly won freedom of lines and color set in sidereal space.

right

Paul Klee followed along the same path, but in his own way. In one of his most popular and most frequently reproduced paintings — *Landscape with Yellow Birds* (1923, Kunstmuseum, Basel) — the birds are sitting on fantastic plants, which defy botanical classification. On the upper border of the picture a bird is painted upside-down, indicating spatial fluidity. One is reminded of the experience of being under water, where the body may move in any direction, unfettered by the laws of gravity. In the less famous picture *Ad Marginem* (1930), the representation of the cosmic atmosphere is even further developed. A red planet hovers in the center of an indeterminate background of a greenish hue. Fantastic figurations grow along the margin. Plants, animals, eyes, all are forms *in statu nascendi*, still polyvalent in their significance. Like primeval hybrid figures, they cannot be assigned to definite zoological species. Here and there is inscribed a calligraphically precise letter, suddenly losing its every-day meaning and becoming retransformed into a magic symbol — from which it once originated.

From the upper border a naked stem of a plant thrusts itself into the center of the picture, and a bird with a long beak marches — again upside down — in space without gravity. The forms do not offer even the remotest similarity to prehistoric motifs. Only the problem of constancy — as we understand it — comes into focus, not in the sense of a direct rational continuation, but rather as that quality of the human mind which suddenly brings back to the surface of consciousness knowledge which apparently had sunk into fathomless depths. And this is what has happened to artistic creation in our time.



351. PAUL KLEE: *"Ad Marginem." Watercolor, 1930*

The eternal present

The complete freedom and independence of vision of primeval art has never since been attained. It was its distinguishing characteristic. In our sense, there was no up and no down, no above and no below. Whether an animal appeared in a vertical position or in any other position was irrelevant to the eye of prehistoric man. Nor was there a clear distinction or separation of one object from another — witness the continuous use of superimposition — nor rules of related size and scale. Gigantic bulls of the Magdalenian era could stand alongside tiny deer from Aurignacian times, as around the dome of Lascaux. Violent juxtaposition in size as well as in time were accepted as a matter of course. All was displayed within an eternal present, the perpetual interflow of today, yesterday, and tomorrow.

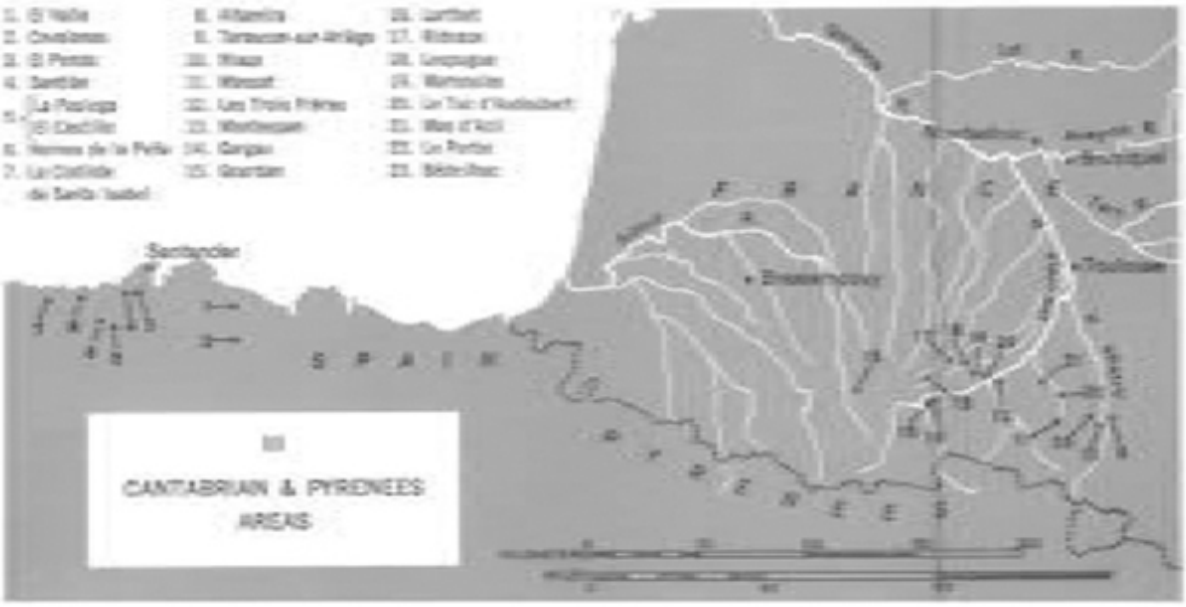
Every prehistoric work of art gives proof of this. Whenever possible the old designs were preserved, but the lines of both earlier and later works intermingle till they sometimes — but only to *our* eyes — appear inextricable. It was early recognized that this superimposition was due not to idle chance but to a deliberate reluctance to destroy the sacred past. Peyrony and Capitan, who in the early days of this century explored the most important caverns of the Dordogne, even then pointed out that "wherever one finds drawings of different periods superimposed upon one another, the last ones, though they bear no relation to the others, never obliterate them more than is absolutely necessary for their own execution. The older drawings were never deliberately destroyed. On the contrary, they were respected almost as though they were sacred" (Capitan, Breuil, Peyrony, 1924, pp. 95–96).

Primeval art was made by nomads. This being so, it is a matter for wonder that many of the caverns contain works ranging from the beginning to the end of prehistoric art — from the Aurignacian up to the Azilian eras.

51, 267 col

Whether one looks at the Hall of the Hieroglyphs of Pech-Merle, with its intertwining figurations, or at the Altamira ceiling, with its powerful sequence of animals intimately associated with undecipherable symbols, the space conception of primeval art remains the same. It is not chaos. It approaches rather to the order of the stars, which move about in endless space, unconfined and universal in their relations.

II
LES EYZIES (Dordogne) and environs
Laurence E. Peyrony, Les Eyzies and the Vézère Valley:
An Illustrated Guide (Montignac, 1959)


1. El Valle
2. Covalanas
3. El Pendo
4. Santián
5. La Pasiega
(6) Castillo
6. Hornos de la Peña
7. La Garma
de Santa Isabel
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9. Tarascon-sur-Ariège
10. Niaux
11. Marsoulas
12. Les Trois Frères
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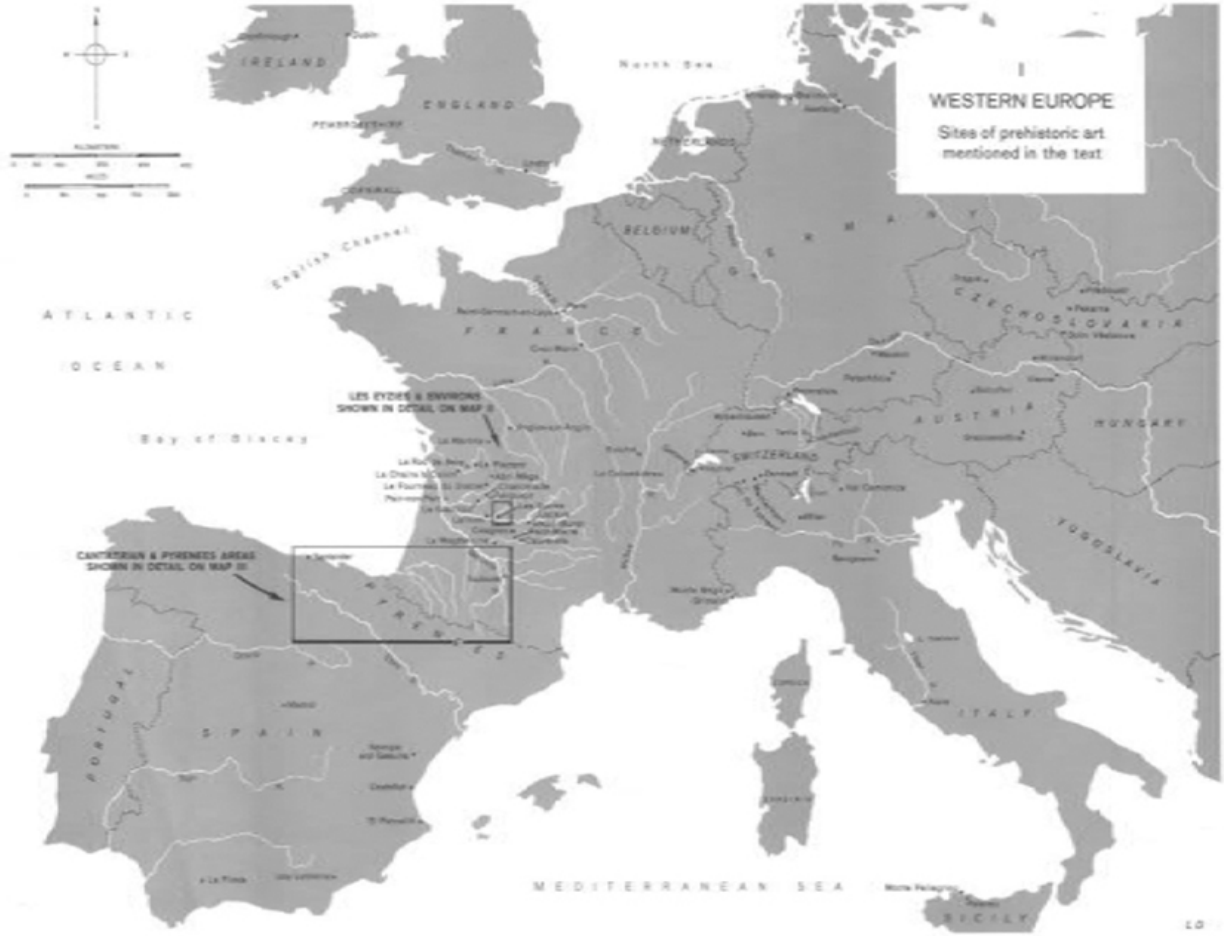
III
CANTABRIAN & PYRENEES
AREAS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WESTERN EUROPE
Sites of prehistoric art
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LES EYZIES & ENVIRONS
SHOWN IN DETAIL ON MAP II
CANTABRIAN & PYRENEES AREAS
SHOWN IN DETAIL ON MAP III
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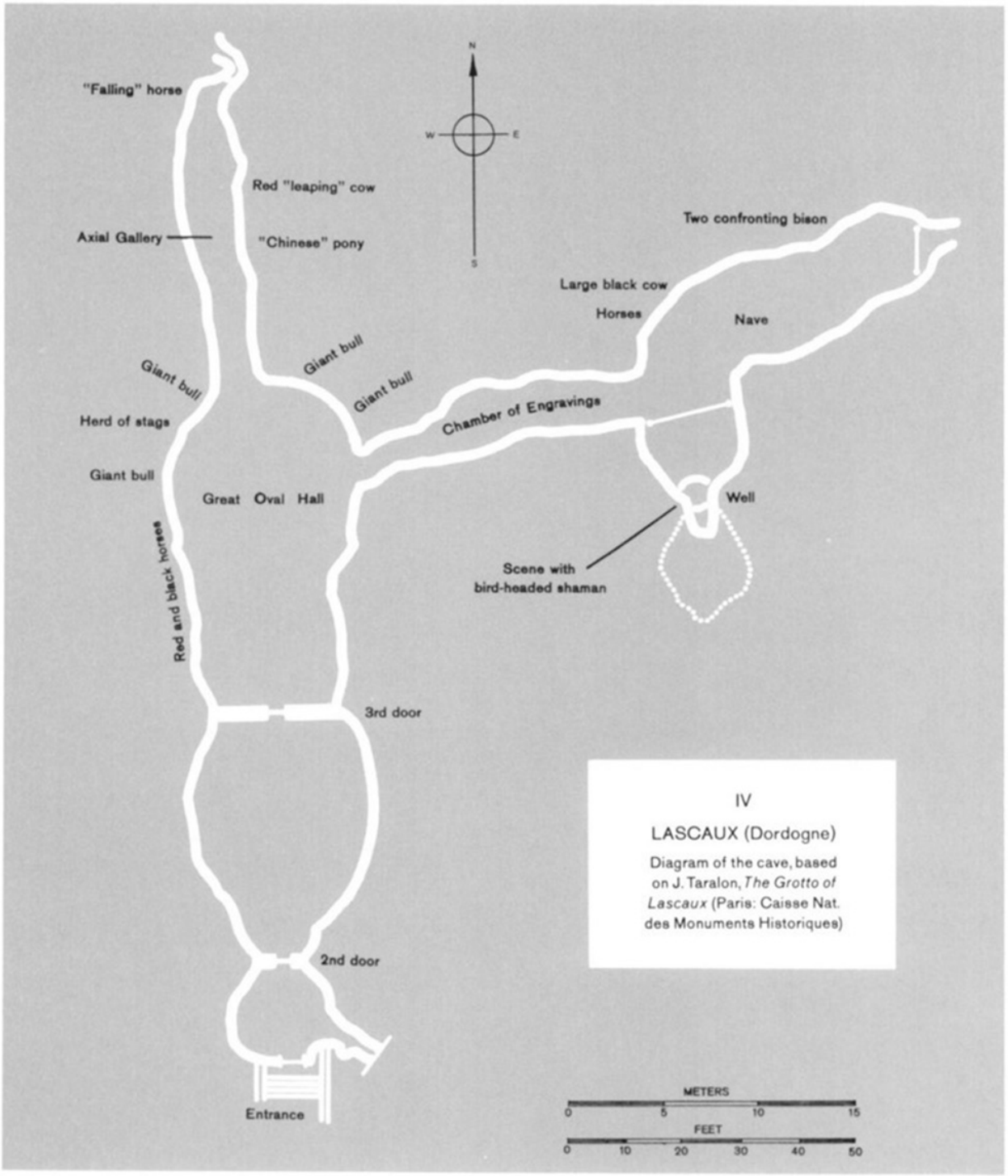
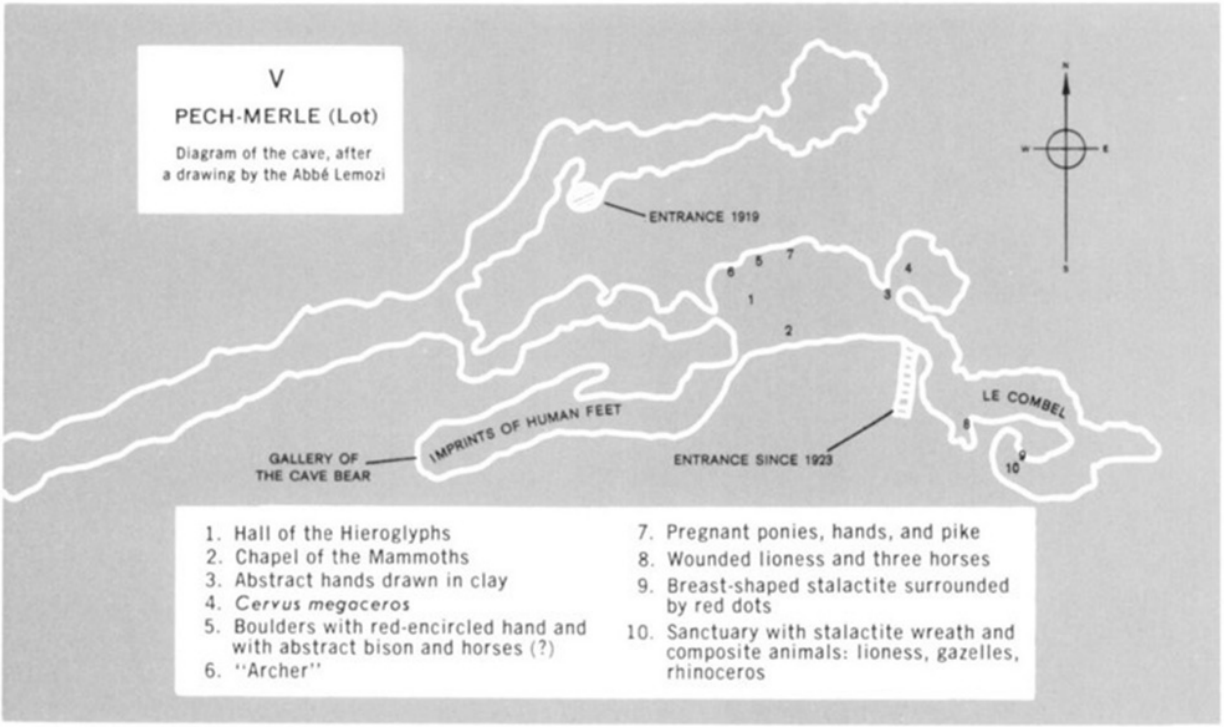
AUSTRIA
HUNGARY
YUGOSLAVIA
ITALY
SPAIN
PORTUGAL
MEDITERRANEAN SEA
SICILY



IV

LASCAUX (Dordogne)

Diagram of the cave, based on J. Taralon, *The Grotto of Lascaux* (Paris: Caisse Nat. des Monuments Historiques)


V
PECH-MERLE (Lot)
Diagram of the cave, after a drawing by the Abbé Lemozi
ENTRANCE 1919
GALLERY OF THE CAVE BEAR
IMPRINTS OF HUMAN FEET
ENTRANCE SINCE 1923
LE COMBEL
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2. Chapel of the Mammoths
3. Abstract hands drawn in clay
4. Cervus megaceros
5. Boulders with red-encircled hand and with abstract bison and horses (?)
6. "Archer"
7. Pregnant ponies, hands, and pike
8. Wounded lioness and three horses
9. Breast-shaped stalactite surrounded by red dots
10. Sanctuary with stalactite wreath and composite animals: lioness, gazelles, rhinoceros

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XX. LAUSSEL: The Venus of Laussel. P: Weider.

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1. LAUGERIE HAUTE: Pink pebble. Museum, Les Eyzies. P: Herdeg / Weider.
2. ALTAMIRA: Aurignacian hind. Engraving on clay. Right Gallery. P: Weider / With drawing.
3. PECH-MERLE: Aurignacian drawing of the outline of a stag. P: Weider / With drawing.
4. PECH-MERLE: Abstract silhouette of a bison, red disks, and figures. P: Herdeg and Weider.
5. PECH-MERLE: Attacking bison. P: Herdeg and Weider / With drawing.
6. GOURDAN: Frontal representation of reindeer; Magdalenian. Museum, St-Germain-en-Laye. P: Hervé / With drawing from Piette, 1904.

7. EL PENDO: Late Magdalenian engraving of ibex head. Museum, Santander. P: Herdeg.
8. EL PENDO: Late Magdalenian engraving of ibex head (unfinished). Museum, Santander. P: Herdeg.
9. Abstractions of horse heads: a) RAYMONDEN: Engraving on bone. Drawing by Breuil / b) BRASSEMPOUY: Sculptured bone. Drawing after Piette, 1904 / c) LACAVE: Engraving on bone. Drawing by Breuil / d) LAUGERIE BASSE: Engraving on bone. Drawing by Breuil.
10. ABRI MURAT: Late Magdalenian head of ibex. Museum, Cabrerets. P: Weider / With drawing by Lemozi.
11. SOUTHERN ANDALUSIA: Animal abstractions from rock shelters. From Breuil and Burkitt, 1.929.
12. SUSA, early phase, style I (fourth millennium): Vase with abstract birds. Louvre. P: Archives photographiques.
13. SUSA, late phase, style I: Bowl with abstract animals. Louvre. P: Studio Pierre, Paris.
14. FERNAND LÉGER: "Pitchforks leaning against a wire fence." Watercolor, 1944. Coll. S. Giedion.
15. JOAN MIRÓ: New Year's card for José Luis Sert, 1949.
16. WASSILY KANDINSKY: "The Rider." Woodcut, 1911. From Paulcke, 1923.
17. Potato-field: drawing by seven-year-old child. From Luquet, 1930, p. 167.
18. PECH-MERLE: Ceiling of the Hall of the Hieroglyphs, with clay finger drawings. P: Herdeg and Weider. Drawing for fig. 18 by Lemozi.
19. GEORGES BRAQUE: "Hercules and the Stymphalian Birds." Engraving in blackened plaster, 1932. Formerly Galerie Maeght, Paris.
20. HANS ARP: "Configuration." Lithograph, 1927.
21. LES TROIS FRERES: Superimposed drawings of animals on rock. Drawing by Breuil.
22. PECH-MERLE: Chapel of the Mammoths. Central figures of horse and bison. P: Herdeg.
23. PECH-MERLE: Detail of fig. 22. P: Herdeg.
24. LORTHET: Forepart of a fish engraved on bone. P: Graziosi, 1960, pl. 50e.
25. KAKUDA TRIBE, Australia: Bark painting of a giant barracuda with transparent organs. From Spencer, 1914, fig. 88.
26. GORGE D'ENFER: Flat relief of salmon on ceiling of the Abri du Poisson. P: Weider.
27. ESKIMO: Drawings of life line. From Gjessing, 1.944, p. 58.
28. ZUÑI INDIANS: Drum jar, after 1925. Taylor Museum, Colorado Springs. P: Courtesy of the Museum and George Mills.
29. PAUL KLEE: "The Pierced Mother Animal." Colored drawing, 1923. Coll. Karl Nathan, New York. P: F. J. Darmstaedter, New York, courtesy of Karl Nathan.
30. LASCAUX: Nave. Superimposed horses. Drawing for fig. 276.
31. Transparency in primitive and child art: a) pregnant woman, by Dakota Indian; b) bird, from Spanish ceramic; c) chicken inside egg, by a child of five; d) whale, by Eskimo. Drawings from Luquet, 1930.
32. EGYPT, New Kingdom: Ostracon: mother and child. Cairo Museum / P: Museum.
33. MARC CHAGALL: "The Cattle Dealer." 1912. Kunstmuseum, Basel. P: Courtesy of the Museum.
34. PECH-MERLE: Ceiling of the Hall of the Hieroglyphs. Detail of hunter without head. Drawing by Lemozi.
35. GASULLA GORGE, REMIGIA: Boars hunted by men. Drawing from Porcar, et al., 1935, pl. 65.
36. EBBOU: Aurignacian horse with forelegs crossed. P: A. Perret, Pont-St-Esprit.
37. ABRI MONTASTRUC: Perforated staff with jumping horse. Coll. Bétirac. P: Herdeg.
38. LA MADELEINE (Dordogne): Bison with back-turned head, Magdalenian IV. Museum, St-Germain-en-Laye. P: Herdeg, of plaster copy in Museum, Les Eyzies
39. LA MADELEINE: Hyena or feline, Magdalenian IV. Museum, St-Germain-en-Laye. P: Museum.
40. ABRI MURAT: Pebble engraved with ibex and ritual scene. Drawing by Lemozi.
41. PAUL KLEE: "Die Scene mit der Laufenden." Drawing, 1925. Klee Stiftung, Basel; © S.P.A. D.E.M, 1961, by French Reproduction Rights Inc.

42. ALTAMIRA: Detail of "exclamation marks." P: Weider.
43. ALTAMIRA: Clay ceiling with "exclamation marks." P: Weider.
44. PECH-MERLE: Probably right and left hands. P: Weider / With drawing. Drawing for fig. 44.
45. GARGAS: Hands surrounded by color. P: Weider.
46. KAP ABBA CAVE, DAREMBANG, New Guinea: Negative hand impressions. P: Frobenius Institute, Frankfurt a. M.
    Drawing for fig. 48.102.
47. EL CASTILLO: Cavern wall covered with hands. P: Weider.
48. EL CASTILLO: Detail of the wall. P: Weider.
49. GARGAS: Single hand with mutilated fingers. P: Weider.
50. HOPI INDIANS: Bowl from the ruins of Sikyatki village, Arizona. Smithsonian Institution. P: Courtesy of the Institution.
51. EL CASTILLO: Sensitive left hand. P: Herdeg.
52. PECH-MERLE: Red-encircled left hand with red disks. P: Herdeg.
53. PECH-MERLE: Black-encircled left hand (drawing of detail from fig. 88)
54. PECH-MERLE: Black-encircled right hand (detail from fig. 88). P: Weider.
55. CAP BLANC: Fragmentary hand above a horse. P: Weider.
56. LAUGERIE BASSE: Magdalenian hand, front and back view. Museum, Périgueux. P: Weider.
57. SANTIÁN: Red-painted signs, most of them abstract hands. P: Weider / Drawing by Breuil.
58. SANTIAN: Arm and hand showing three flowerlike fingers and a thumb. P: Weider / With drawing.
59. EGYPT, First and Second Dynasties: Hieroglyphs of arm, hand, and finger. From Hilda Petrie, 1927.
60. EGYPT, Predynastic: Slate palette. From Petrie, et al., 1912.
61. LOS LET REROS: Headless hour-glass-shaped figure with flowerlike hands and feet. From Breuil, 1935.
62. MON TE BEGO: Demon with upraised hands and two daggers. Drawing from Louis, 1950.
63. BOHUS, Sweden: "Five-fingered god." Drawing after Lohse, 1934.
64. EGYPT: Early hieroglyph of the *ka*.
65. JAPAN: Buddhist ritual gesture. Drawing from Saunders, 1960.
66. LAUGERIE BASSE: Engraving showing magic capture of a fish. Drawing from Girod and Massénat, 1900.
67. PICASSO: Mural, Unesco Building, Paris, 1958. P: Magnum (Unesco).
68. MESOPOTAMIA, third millennium: Deities and left-hand symbol on cylinder seal. Drawing from Frankfort, 1939, fig. 42.
69. LE CORBUSIER: Sketch for monument, "The Open Hand," for Chandigarh, India. Drawing by Le Corbusier.
70. FERNAND LÉGER: Cartoon for stained-glass window in the church at Audin-court, France. Coll. S. Giedion.
71. EGYPT: Hieroglyphs for threshing floor and wheat grains. Drawings from Gardiner, 1957.
72. LA QUINA: Limestone ball and quartz *persecuteur*. Museum, Les Eyzies. P: Herdeg and Weider.
73. EL GUETTAR, Tunisia: Cairn of Mousterian spheroids. P: Dr. M. Gruet.
74. LA FERRASSIE: Two views of the rock shelter. P: Weider.
75. LA FERRASSIE: Plan of rock shelter, by D. Peyrony.
76. CHIMANE INDIANS, Bolivia: Sanctuary, with cupules. P: Frobenius Institute, Frankfurt a. M.
77. LA FERRASSIE: Plan and section of triangular tombstone, by D. Peyrony.
    Drawing for fig. 78.
78. LA FERRASSIE: Triangular tombstone, with the first man-made cupules; Mousterian. Museum, Les Eyzies. P: Herdeg and Weider.

79. LA FERRASSIE: Middle Aurignacian limestone block with spiral cupules. Museum, Les Eyzies. P: Herdeg / With drawing.
80. ABRI CELLIER: Aurignacian limestone block with large cupule and vulvas. Museum, Les Eyzies. P: Herdeg and Weider.
81. LAUGERIE HAUTE: Boulder with early Magdalenian large cupule and engraved horse. Museum, Les Eyzies. P: Herdeg and Weider / With drawing.
82. LES EYZIES: *Lusus naturae* — stone from a river bed perceived as an animal. Museum, Les Eyzies. P: Weider.
83. TELL EL AMARNA: Stele with irregular cupules. Cairo Museum. P: Museum.
84. KARNAK: Emblem of the son of Ra with cupule. P: S. Giedion.
85. COL DU TORRENT: Block with cupules and rings enclosing a cross. Drawing from Schenk, 1912.
86. ZERMATT: Block with small cupules, abstract human figures, and rings enclosing crosses. Drawing from Schenk, 1912.

Drawing for fig. 88.

87. AL'UQAIR (Iraq): Lion (?) painted with large dots. Iraq Museum, Baghdad. P: Museum.
88. PECH-MERLE: Aurignacian horses with large dots placed both inside and outside their outlines. P: Weider.
89. MARSOULAS: Small bison, outline and body painted with red dots. Drawing.
90. COVALANAS: Hind outlined in dots. P: Weider / With drawing.
91. LAPLAND: Shamanistic drums with representations of sun, T-shaped drumsticks, and brazen ring. Drawing from Scheffer, 1704.
92. LAPLAND: Shamans using drum and lying in trance with drum on head. Drawing from Scheffer, 1704.
93. LABATUT: Stone ring, perforation in section. Drawing by R. Maurier.
94. LABATUT: Artificially made stone ring through the ridge of a block, upper Aurignacian. Museum, Périgueux. P: Weider.
95. ABRI CELLIER: Curving perforation of a stone block. Museum, Les Eyzies. P: Herdeg.
96. CAP BLANC: Hindquarters of horse with artificial ring; detail of ring. P: Herdeg and Weider.
97. LA QUINA: Stone block with large perforation. P: Herdeg.
98. CORNWALL: "Menetol" and neolithic monoliths. P: C. Giedion-Welcker.
99. CORNWALL: "Menetol" and "Tolven." Drawings by Lukis, 1885.
100. ABRI DU POISSON: Aurignacian perforated bone staff. P: Herdeg and Weider.
101. LAUGERIE BASSE: Perforated engraved bone disk showing a hind attacked by spears; then already captured. P: Weider.
102. ABRI MÈGE, TEYJAT: *Baton de commandement,* engraved with several figures. P: Capitan, Breuil, Bourrinet, Peyrony, 1919, fig. 5 / With drawing of horses by Breuil.
103. EL PENDO: *Baton de commandement,* with animal heads. Drawing, rolled out to show both sides, by Obermaier, 1932.
104. ABRI RAYMONDEN: *Baton de commandement,* with large bird, middle Magdalenian. Museum, Périgueux. P: Weider.
105. LA MADELEINE (Dordogne): Bone staff with four perforations. Drawing from Lartet and Christy, 1865–75.
106. LE SOUCI: Bone staff with eight perforations. Museum, Périgueux. P: Weider.
107. LAUSSEL: Detail of the Venus. P: Weider.
108. LA MAGDELEINE (Tarn): Detail of engraved female figure. P: Weider/ With drawing of lower torso.
109. UR: Bird-headed clay figurines, fourth millennium B.C. University Museum, Philadelphia. P: Museum.
110. EGYPT, Badarian culture: Female clay figure. British Museum. P: Museum.
111. CYCLADES: Marble idol. Musée d'art et d'histoire, Geneva. P: Museum.

112. LA FERRASSIE: Aurignacian stone with large incised vulva. Museum, Les Eyzies. P: Herdeg.
113. LA FERRASSIE: Aurignacian stone with vulvas and small cupules. Museum, Les Eyzies. P: Herdeg / With drawing.
114. CHIMANE INDIANS, Bolivia: Blocks with incised vulvas at a salt sanctuary. P: Frobenius Institute, Frankfurt a. M.
115. CHIMANE INDIANS: A block from the salt sanctuary. P: Frobenius Institute, Frankfurt a. M.
116. LA FERRASSIE: Aurignacian stone block with vulvas, animal's legs and phallus. Museum, Les Eyzies. P: Herdeg / With drawing.
117. ABRI CELLIER: Incised animal head and vulva. Museum, Les Eyzies. P: Herdeg / With drawing.
118. LA FERRASSIE: Stone block showing head of animal demon. Middle Aurignacian. Museum, Les Eyzies. P: Herdeg.
119. PACIFIC NORTHWEST INDIANS: Pre-Columbian animal demon. From Wingert, 1952.
120. LA FERRASSIE: Reverse side of fig. 118, showing vulva. Museum, Les Eyzies. P: Herdeg.
121. Abstract types of vulvas and female figure. From Leroi-Gourhan, 1958, p. 520.
122. EL CASTILLO: Rock niche containing five red vulva symbols and a black feathered shaft representing a phallus. P: Weider.
123. EL CASTILLO: Detail of fig. 122. P: Weider.
124. JOAN MIRÓ: Sculpture in plaster, 1948. From Sweeney, 1959.
125. LAUSSEL: Aurignacian phallic stone block with cupules. Coll. Dr. P. Charon, Bordeaux. P: Weider.
126. TARXIAN: Neolithic phallic cone with cupules. Malta Museum. P: From Manneville, 1939.
127. LAUGERIE HAUTE: Aurignacian block with phallus and six cupules. Museum, Les Eyzies. P: Herdeg and Weider.
128. LAUSSEL: Aurignacian block with incised phallus. Museum, Les Eyzies. P: Herdeg and Weider.
129. PECH-MERLE: Phallic stalagmite pitted with small cupules in Le Combel. P: Herdeg.
130. GORGE D'ENFER: Branched head of pierced staff engraved as a double phallus. Museum, St-Germain-en-Laye. P: Weider, from a plaster cast.
131. BRUNIQUEL: Pierced phallus-shaped staves engraved with fishes and abstract vulvas. Drawing by Breuil, from Breuil and Saint-Périer, 1927.
132. LORTHET: Plaster cast of engraved reindeer antler, rolled out to show both sides. Composite based on Piètte, 1.907, pl. XL, 4. Museum, St-Germain-en-Laye. With details of the antler. Drawing from Piètte, 1907, pl. XXXIX, 1.
133. LA VACHE: Engraved bison's head with outstretched tongue and abstract phalluses and vulvas. Coll. Robert, Tarascon. P: Courtesy of M. Romain Robert.
134. LA MADELEINE (Dordogne): Engraved bear's head with outstretched tongue and realistic phallus and vulva. P: Herdeg and Weider / With drawing by Leroi-Gourhan, 1958, p. 386.
135. MASSAT: Engraved bear's head with outstretched tongue and abstract phallus and vulva. Museum, St-Germain-en-Laye. P: Museum / With drawing by Leroi-Gourhan, 1958.
136. PACIFIC NORTHWEST INDIANS: Ritual rattle. American Museum of Natural History, New York. P: Copyright, Museum.
137. COPTOS: Predynastic ithyphallic statue of the god Min. Ashmolean Museum, Oxford. P: Copyright, Museum.
138. COPTOS: Girdle flap from fig. 137. Ashmolean Museum. P: Copyright, Museum / With drawing.
139. ARUDY: Engraved horse with tongue outstretched toward abstract vulva symbols. P: Weider.
140. COPTOS: Girdle flap from another Min statue. Ashmolean Museum. P: Copyright, Museum / With drawing from Petrie, 1896, p. 8.
141. NIAUX: Feather-like symbol. P: Herdeg and Weider.

142. LES COMBARELLES: Magdalenian engraving of ithyphallic man and another human figure. P: Herdeg and Weider / With drawing.
143. LA MADELEINE (Dordogne): Engraved animal-headed ithyphallic figure. Museum, Les Eyzies. P: Weider.
144. EL'AMRAH, early Nagadah period: Ithyphallic statuette. Cairo Museum. P: Museum.
145. LE PORTEL: Red-painted ithyphallic figure. P: Herdeg and Weider / With drawing.
146. LAUSSEL (Dordogne): Limestone phallic figure. Coll. Dr. P. Charon, Bordeaux. P: Weider.
147. PECH-MERLE: Breast-shaped stalactite in Le Combel, surrounded by red dots. P: Weider / With drawing.
148. PECH-MERLE: Detail of fig. 147. P: Weider / With drawing.
149. PECH-MERLE: Wreath of breasts in Le Combel. P: Weider.
150. SIALK, Iran: Libation vessel, third millennium B.C. Louvre. P: Caisse nationale des monuments historiques.
151. EGYPT, New Kingdom: The scorpion-goddess Selkhit; ca. 1500 B.C. Drawing from Jéquier, 1946, p. 41.
152. CYCLADES: *Kernoi* vases. Drawing from Dussaud, 1906.
153. ALAJA HÜYÜK: Stag-god. Ankra Museum. P: Museum, courtesy of Professor B. Oezer.
154. BOGHAZKÖY (Hittite): "The god on the stag," steatite stele. Drawing from Vieyra, 1955.
155. GREEK: Artemis Ephesia; ca. 1st cent. A.D. Museo nazionale, Naples. P: Museum.
156. EPHESUS: Newly found statue of Artemis Ephesia; ca. 1st cent. A.D. P: From Miltner, 1958.
157. GREEK: Artemis Ephesia, probably 5th cent. B.C. National Museum, Athens. P: Styros Meletzes, courtesy of the Museum.
158. LE PORTEL: Great red symbol and animal. P: Herdeg and Weider / With drawing of symbol.
159. LE PLACARD: Perforated staff. Museum, St-Germain-en-Laye. P: Lucien Hervé.
160. RAYMONDEN: Dagger-shaped perforated staff. P: Weider / With drawings.
161. LA MADELEINE (Dordogne): Fragments of a bone staff with "fish tails" and a penis. With drawing from Breuil, 1927.
162 . CLONFINLOUGH, Ireland: Neolithic rock engravings. Drawing after Burkitt, 1926, figs. 19–20.
163. Symbols from eastern Spain and Le Mas d'Azil; Egyptian *ankh* hieroglyph. Drawings after Breuil and Burkitt, 1929 (except for *ankh*).
164. KARNAK: Inscription on obelisk of Hatshepsut. P: G. K. Kidder Smith.
165. Figurines, perhaps bisexual: a) Lake Trasimeno (Italy); b) Weinberg Caverns, Mauern (Bavaria); c) Jordan Valley (Palestine). Drawings.
166. PEMBROKESHIRE, Wales: Bisexual figurine. P: From Breuil, 1955.
Drawing for fig. 167.
167. LAUSSEL: Double figure incised in rock. P: Herdeg.
168. KANISH (Hittite): Double-headed figure on which a child's figure appears (transparently?). Kayseri (Ankara) Museum. P: Museum.
169. SIERRA DE HARANA: Oval late neolithic paintings. Drawing from Spahni, 1957, p. 619.
170. ALTAMIRA: Ceiling, showing symbols and horses. From Breuil and Obermaier, 1935, pl. VI.
171. ALTAMIRA: Claviform symbol. Drawing from Leroi-Gourhan, 1958.
172. ALTAMIRA: Scaliform symbol (detail). P: Weider.
173. LA PASIEGA: Rock cleft with indistinct tectiforms. P: Herdeg.
174. ALTAMIRA: Group of tectiforms. P: Weider.
175. ALTAMIRA: Detail of tectiform. P: Herdeg.
176. ALTAMIRA: Another detail. P: Herdeg.
177. EL CASTILLO: Groups of tectiforms. P: Weider.
178. EL CASTILLO: Red symbol on the Wall of Hands. P: Herdeg.

179. FONT-DE-GAUME: Straight-line tectiform. P: Weider / With drawing.
180. LE GABILLOU: Latticed symbol. P: Weider / With drawing.
181. DRACHENLOCH, Switzerland: Mousterian bear skulls. Drawing by T. Nigg.
182. DRACHENLOCH: Bear skull with thigh bone pushed through cheek. Museum, St. Gallen. P: Bächler.
183. AHRENSBURG-STELLMOOR, Germany: Magdalenian wooden post surmounted by reindeer skull. Drawing from Rust, 1948.
184. ALTAMIRA: Meandering lines traced in clay. P: Herdeg.
185. HORNOS DE LA PEÑA: Head of hind. P: Weider / With drawing.
186. PECH-MERLE: Clay drawing of giant stag. P: Herdeg and Weider.
Drawing for fig. 186 by Lemozi.
187. LASCAUX: Aurignacian stag. P: Herdeg and Weider.
188. ALTAMIRA: Musk ox. P: Weider / With drawing.
189. HORNOS DE LA PEÑA: Rock face with head of bison, ibex, and head of hind. P: Weider.
Drawing for fig. 189.
190. HORNOS DE LA PEÑA: Ibex, detail of fig. 189. P: Weider.
191. HORNOS DE LA PEÑA: Horse, snake, and animal head. P: Weider /With drawing.
192. NIAUX: Magdalenian clay tracing of a bison. P: Herdeg and Weider / With drawing.
193. LA BAUME-LATRONE: Clay outlines on rock face: serpent and *Elephas antiquus.* Drawing from E. Drouot, 1953.
194. LA BAUME-LATRONE: *Elephas antiquus.* Drawings after E. Drouot, 1953.
195. BELCAYRE: Outline of animal on limestone block. Museum, Les Eyzies. P: Herdeg and Weider.
196. LA MOUTHE: Large bison. P: Herdeg and Weider.
197. EBBOU: Hind engraved almost entirely in straight lines. P: A. Perret.
198. EBBOU: Ibex with back and hindquarters drawn in a single curve. P: A. Perret.
199. EBBOU: Ibex with crossed legs and large horns. P: A. Perret.
200. TIARET, Algeria: Prehistoric engraving of feline. Drawing by F. E. Roubet, 1947.
201. LES TROIS FRERES: Three snow owls. P: Herdeg.
202. LA MOUTHE: “Bison de la découverte.” P: Weider / With drawing.
203. LA MOUTHE: Three animals. P: Herdeg and Weider.
204. LA GRÈZE: Bison. P: Herdeg.
Drawing for fig. 205 by Lemozi.
205. LE COMBEL, PECH-MERLE: Wounded lion, three horses, and many red disks. P: Weider / With drawing.
Drawing for fig. 207.
206. DAREMBANG, New Guinea: Opening in rock described as a vulva. Drawing after photograph by Frobenius Institute.
207. LE COMBEL, PECH-MERLE: Painted stalactites in form of female breasts, triangular opening in rock, large red disks. P: Weider.
Drawing for fig. 208 by Lemozi.
208. LE COMBEL, PECH-MERLE: Composite animals, rhinoceros rump, antelope heads, lioness with diadem of red disks. P: Weider / With drawing.
209. PAIR-NON-PAIR: Two horses. P: Weider / With drawing.
210. PAIR-NON-PAIR: Detail of head of stallion. P: Weider.
211. PAIR-NON-PAIR: Animal with two heads. P: Weider / With drawing.
212. LA COLOMBIÈRE: Pebble. Museum, Ain. P: Peabody Museum, Harvard University.

213. NORTHERN SPAIN: Late Magdalenian bone implements. Museum, Santander. P: Herdeg.
214. LES TROIS FRÈRES: Horse head, *forme découpée*. Coll. Bégouën, Chateau Pujol (Ariège). P: Herdeg.
215. LE MAS D'AZIL: Three horse heads upon a *propulseur*. Museum, St-Germain-en-Laye. P: Museum.
216. LAUGERIE BASSE: Horse head, *contour découpé*. Musée de l'Homme, Paris. P: Museum.
217. LE MAS D'AZIL: Horse head, *forme découpée*. Museum, St-Germain-en-Laye. P: Museum.
218. FONT-DE-GAUME: Forepart of horse engraved in a rock niche. P: Herdeg and Weider.
Drawing for fig. 219.
219. LES TROIS FRÈRES: Two engraved horses. P: Herdeg and Weider.
220. PECH-MERLE: Painted and incised Magdalenian bison. P: Herdeg / With drawing.
221. LA PASIEGA: Painted bison verging on abstraction. P: Weider / With drawing.
222. LE GABILLOU: Finely engraved reindeer. P: Weider / With drawing.
223. LE GABILLOU: One horse following another. P: Weider / With drawing.
224. LE GABILLOU: Large bison and small horse. P: Weider / With drawing.
Drawing for fig. 225.
225. LES COMBARELLES: Mammoth with two trunks. P: Weider.
226. LES COMBARELLES: Two animals, facing one another. P: Herdeg and Weider / With drawing.
227. LES COMBARELLES: Head of horse at right. P: Herdeg and Weider.
228. LES COMBARELLES: Lioness. P: Herdeg and Weider / With drawing.
229. LES COMBARELLES: Reindeer with outstretched head. P: Weider / With drawing.
230. FONT-DE-GAUME: Reindeer and black bison. P: Herdeg and Weider / With drawing.
231. LE PORTEL: Three bison in the Galerie Breuil. P: Herdeg and Weider / With drawing of large bison to left.
232. LE PORTEL: Painted horse pawing the ground. P: Herdeg and Weider.
233. LES TROIS FRÈRES: Lioness. P: Herdeg and Weider / With drawing.
234. FONT-DE-GAUME: Leaping horse. P: Herdeg and Weider/ With drawing.
235. LA CHAIRE À CALVIN: Head of mare in fig. 236. P: Weider.
236. LA CHAIRE À CALVIN: Two gravid mares. P: Weider.
237. LA CHAIRE À CALVIN: Frieze of animals. P: Weider / With drawing.
238. LE ROC DE SERS: Stone block; two horses following a human figure, another figure attacked by a bull. Museum, St-Germain-en-Laye. Drawing after H. Martin, 1928.
239. LE ROC DE SERS: Female bison with head of sow. Museum, St-Germain-en-Laye. P: L. Hervé.
240. LE ROC DE SERS: Small gravid horse following bison with sow's head. Museum, St-Germain-en-Laye. P: L. Hervé.
241. LE ROC DE SERS: Two ibexes. Museum, St-Germain-en-Laye. P: L. Hervé.
242. LE FOURNEAU DU DIABLE: Block covered with animal figures. P: Herdeg / With drawing.
243. LE FOURNEAU DU DIABLE: Detail showing two cows and the blurred figure of another animal. P: Herdeg.
244. CAP BLANC: Entrance to rock shelter. P: Weider.
245. CAP BLANC: Frieze of horses. P: Weider / With drawing*following page*
246. CAP BLANC: The first two horses in fig. 245. P: Herdeg / With drawing.
247. CAP BLANC: Detail of hindquarters of the first horse. P: Herdeg.
248. CAP BLANC: Central horse. P: Herdeg / With drawing.
Drawing for fig. 249.
249. CAP BLANC: Head of central horse. P: Herdeg.
Drawing for fig. 250.
250. COMMARQUE: Head of a beautiful horse. P: Herdeg.

251. CHINA, T'ang Dynasty: Horse from the tomb of the emperor T'ai Tsung. University Museum, Philadelphia. P: Museum.
252. COMMARQUE: Horse engraved in right gallery. P: Herdeg and Weider.
253. COMMARQUE: One of the horses seen through a natural rock opening. P: Herdeg and Weider.
254. Photographing the beautiful horse of Commarque. P: Herdeg.
255. LE TUC D'AUDOUBERT: Male bison about to mount a female bison. P: Herdeg and Weider.
256. LE TUC D'AUDOUBERT: The male bison. P: Herdeg and Weider.
257. LE TUC D'AUDOUBERT: Unfinished bison on the floor of the cavern. P: Herdeg and Weider.
258. PECH-MERLE: Chapel of the Mammoths. Mammoth with long hanging hair. P: Herdeg.
259. PECH-MERLE: Panorama of mammoths, bison, and oxen. P: Weider *following page*
260. PECH-MERLE: Two oxen and two mammoths. P: Herdeg.
261. NIAUX, Salon Noir: Part of the large composition with bison upon different levels. P: Herdeg and Weider.
262. NIAUX: Large horse. P: Herdeg and Weider.
263. NIAUX: Niche with bison and oxen. P: Herdeg and Weider.
264. NIAUX: Detail of bison hoofs. P: Herdeg and Weider.
265. NIAUX: Bison in the center of the composition on the side of the ceiling. P: Herdeg and Weider.
266. NIAUX: Closer view of fig. 265. P: Herdeg and Weider.
267. LASCAUX: First and second bulls, a large brown horse, a small black pony, and small bister Aurignacian stags. P: Herdeg and Weider.
268. EL PARPALLÓ: Engraving of goat on stone. Drawing from Pericot Garcia, 1942.
269. LASCAUX: Head of the first gigantic bull. P: Herdeg and Weider.
270. LASCAUX: Head of another gigantic bull. P: Herdeg and Weider.
271. LASCAUX: Head of the second gigantic bull. P: Herdeg and Weider.
272. LASCAUX: Forepart of another gigantic bull. P: Herdeg and Weider.
273. PECH-MERLE, Chapel of the Mammoths: "Leaping" mammoth. P: Herdeg / With drawing.
274. LASCAUX: Red "leaping" cow in the axial gallery. P: Herdeg / With drawing.
275. LASCAUX: Left wall of nave with large black cow and smaller engraved horses. P: Herdeg and Weider.
276. LASCAUX: Left wall of nave, with two horses, a third horse engraved within the one to the left. P: Herdeg and Weider.
277. LASCAUX: Left wall of nave, with two polychrome bull bison; Magdalenian. P: Herdeg and Weider.
278. ALTAMIRA: Shells containing variously colored ocher from Magdalenian strata. P: Herdeg.
279. ALTAMIRA: Unpainted outcropping from the ceiling and the great polychrome bison. P: Weider.
280. ALTAMIRA: The steeply sloping ceiling, a polychrome bison painted on one of the outcroppings. P: Herdeg.
281. ALTAMIRA: The great hind. P: Weider / With drawing showing also the bellowing bison, red symbol, and other animals.
282. ALTAMIRA: Head and mane of the bellowing bison. P: Weider / With drawing.
283. ALTAMIRA: Bison with uplifted head. P: Weider / With drawing.
284. ALTAMIRA: Hindquarters of recumbent bison with raised tail. P: Weider / With drawing.
285. ALTAMIRA: The great bison and red symbol. P: Weider / With drawing.
286. ALTAMIRA: Outline in bister of large Aurignacian bison head. P: Weider.
287. BRASSEMPOUY: Profile type of figurine, "La Poire." Drawing.
288. TURSAC: Venus. Superimposed outlines of Tursac and Sireuil Venuses. Delporte, 1960.
289. SIREUIL: The damaged Venus. P: L. Hervé.
290. GRIMALDI: Profile type of figurine, "La Polichinelle." Museum, St-Germain-en-Laye. P: Hurault.

291. SAVIGNANO: Profile type of figurine. P: Graziosi.
292. PETERSFELS, Baden: Profile type of abstract figurine. Drawing after Peters, 1930.
293. PŘEDMOSTÍ, Moravia: Abstract frontal female figure. Museum, Brno. P: Archaeological Institute, Prague / With drawing from Obermaier, 1924.
294. LESPUGUE: Frontal type of figurine. Musée de l'Homme. P: Museum.
295. ABRI PATAUD, LES EYZIES: Frontal type in bas relief. Musée de l'Homme. P: Museum and H. L. Movius, Jr.
296. EL PENDO: Frontal type of headless figurine. Museum, Santander. P: Herdeg.
297. LAUGERIE BASSE: Frontal type of headless figurine, "Vibraye Venus." Musée de l'Homme. P: J. Oster, by courtesy of the Museum.
298. MÉZINE, Ukraine: So-called bird-woman. Drawing from Golomshtok, 1938.
299. EGYPT, Nagadah period: Pottery figurine of kneeling woman. Ashmolean Museum, Oxford. P: Museum.
300. TELL ASMAR: Mother goddess from the Square Temple. Drawing after Frankfort, 1935.
301. AMOYOS, Cyclades: Violin-shaped female idol. Ashmolean Museum, Oxford. P: Museum.
302. PECH-MERLE: Hall of the Hieroglyphs: Headless figure and mammoth. P: Herdeg and Weider / With drawing.
303. LES COMBARELLES: Two female figures. P: Herdeg and Weider / With drawing.
304. ABRI MURAT: Pebble. Museum, Cabrerets. Drawing by Lemozi.
305. LA ROCHE: Part of a stone block with six headless female figures. Chicago Natural History Museum (Field Museum). P: Museum.
306. LA ROCHE: Part of same block with ten headless female figures. Museum, Les Eyzies. P: Weider.
307. COÙGNAC: Interior of the cavern. P: Weider.
308. COUGNAC: Female figure within outline of elephant. P: Weider.
Drawing for fig. 308.
309. COUGNAC: Female figure within outline of elk. P: Weider / With drawing.
310. COUGNAC: Detail of female figure. P: Weider.
Drawing for fig. 3.11.
311. PECH-MERLE: The "prehistoric archer" with curious symbol attached. P: Herdeg and Weider.
312. COUGNAC: Symbol like the one in Pech-Merle. P: Weider.
313. GASULLA, REMEGIA: Scene of execution. Drawing from Porcar, et al., 1936, pl. 21.
314. LAUSSEL: Plan of the site. After Lalanne, 1912, p. 138.
315. LAUSSEL: The limestone overhang of the shelter. P: Weider.
316. LAUSSEL: The "Venus of Laussel" as usually reproduced in art books, etc. From a postcard.
317. LAUSSEL: The "Venus of Laussel" in her original position. From Lalanne, 1912, p. 135.
318. LAUSSEL: The "Venus of Laussel" as seen in its original position. Coll. Dr. P. Charon, Bordeaux. P: Weider.
Drawing for fig. 319.
319. LAUSSEL: Relief of the standing man. Coll. Dr. P. Charon, Bordeaux. P: Herdeg.
320. LAUSSEL: Detail of the "Venus of Laussel." Coll. Dr. P. Charon, Bordeaux. P: Weider.
321. LAUSSEL: The "Venus of Laussel," the head reclining as though on a cushion. Coll. Dr. P. Charon, Bordeaux. P: Herdeg.
322. LA MAGDELEINE (Tarn): Entrance to the cavern. P: Weider.
323. LA MAGDELEINE: Engraving of the horse at the entrance to the cavern. P: Weider.
Drawing for fig. 325.
324. BABYLON, Parthian period: Reclining woman. Louvre. P: Chuzeville.
325. LA MAGDELEINE: Reclining figure of a woman. P: Weider.

326. LA MAGDELEINE: Reclining figure of a woman on right wall. P: Weider / With drawing.
327. LA MAGDELEINE: Detail of right-hand figure. P: Weider.
328. ALTAMIRA: Masklike head in the rock wall. P: Weider.
329. ALTAMIRA: Head in rock at left of foregoing. P: Weider.
330. LES COMBARELLES: Isolated human-like head with staring eyes. P: Herdeg and Weider / With drawing.
Drawing for fig. 331.
331. LES COMBARELLES: Human body with fantastic head. P: Herdeg and Weider.
332. TERME PIALAT: Two personages. Museum, Périgueux. P: Weider.
333. LA MADELEINE (Dordogne): A female and a male figure engraved on two sides of a limestone pebble. Museum, St-Germain-en-Laye. P: Weider, from a plaster cast in Museum, Les Eyzies
334. ABRI MURAT: Engraving on bone showing a man and a woman. Museum, Cabrerets. P: Weider / With drawing by Lemozi.
335. LA MARCHE: Male heads: a) "sorcerer" ; b) with coiffure. Drawings from Lwoff, 1940, p. 167.
336. HORNOS DE LA PEÑA: Human figure with upraised arm. P: Weider / With drawing.
337. LA PASIEGA: Red figure with snarling mouth. P: Weider / With drawing.
Drawing by Breuil for fig. 338.
338. LES TROIS FRÈRES: Bison -man and hybrid animals. P: Herdeg and Weider / With drawing by author.
339. TUNGUS TRIBE, Siberia: Shaman. From Witsen, 1705, p. 664 Drawing by Breuil for fig. 340.
340. LES TROIS FRIÈRES: "The sorcerer." P: Herdeg.
341. LES TROIS FRÈRES: Composite being with bison-like head and human leg. Drawing by Breuil.
342. ABRI MÈGE, TEYJAT: Hybrid figures with human legs. Drawing by Breuil.
343. PECH-MERLE: Hall of the Hieroglyphs: Bird-headed female figure. P: Herdeg and Weider / With drawing.
344. ADDAURA: Dancing figure. Drawing by R. Laur.
345. LASCAUX: The "well," with wounded bison, bird-headed shaman, bird on pole, dots, and tail of departing rhinoceros. P: Laborie, Bergerac.
Drawing for fig. 346.
346. LAUGERIE BASSE: Bull, apparently grazing. P: Giedion.
347. ESKIMO (Northeastern Canada): Handle of a "crooked knife." Royal Ontario Museum, Toronto. P: E. S. Carpenter.
348. PECH-MERLE: Interior of the cavern. P: Herdeg.
349. LE TUC D'AUDOUBERT: Two bison. P: Herdeg and Weider.
350. EGYPT, Eighteenth Dynasty: Wall painting, Tomb of Rekh-mi-Ra, Thebes, 1450 B.C. Copy in tempera, Metropolitan Museum of Art, New York. P: Museum.
351. PAUL KLEE: *Ad Marginem.* Watercolor, 1930. Kunstmuseum, Basel. P: Museum; © S.P.A.D.E.M., 1961, by French Reproduction Rights Inc.

LIST OF WORKS CITED

ABBREVIATIONS

l'Anthrop.	*l'Anthropologie.* Paris.
Bull. Soc. préhist.	*Bulletin de la Société préhistorique française.* Paris.
Cong. préhist.	*Congrés préhistorique de France.* (*Comptes rendus* were usually published in Paris the following year, but in the present work they are cited by the year and location of the congress.)

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